Public Utilities

Volume 63 No. 10 May 7, 1959

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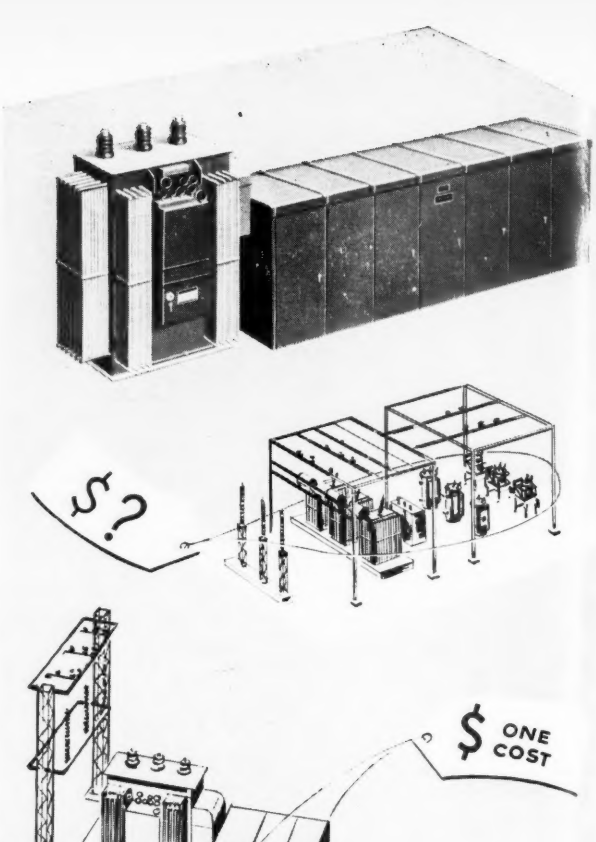

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ARTICLES

FEATURE SECTIONS

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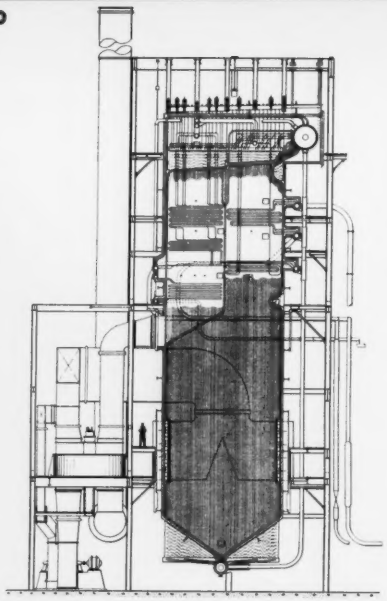
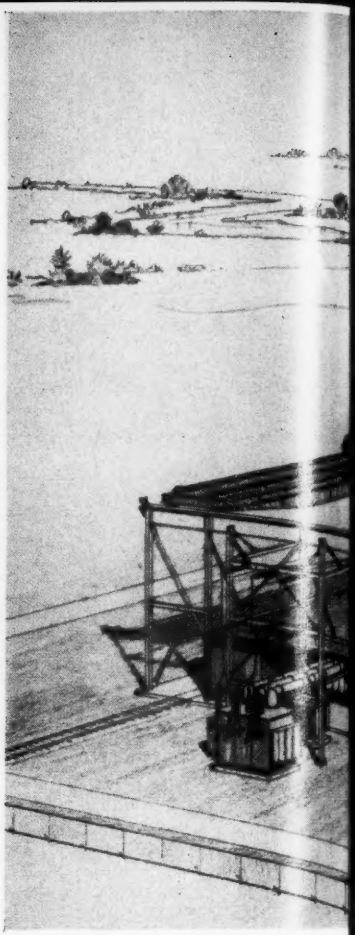




This C-E steam generating unit is now in service at the Roy S. Nelson Station of the Gulf States Utilities Company, and a duplicate is nearly ready. These are radiant reheat boilers with a reheater section located over the secondary superheater surfaces directly above the furnace. An economizer section is located below the primary superheater surface in the rear pass, and a regenerative air heater follows the economizer section. Each unit is designed to produce 700,000 lb steam per hr at a pressure of 1,500 psig and a temperature of 1,000 F, reheated to 1,000 F. Primary fuel is natural gas, with provision for burning oil, fired through C-E Tilting, Tangential Burners.

New Roy S

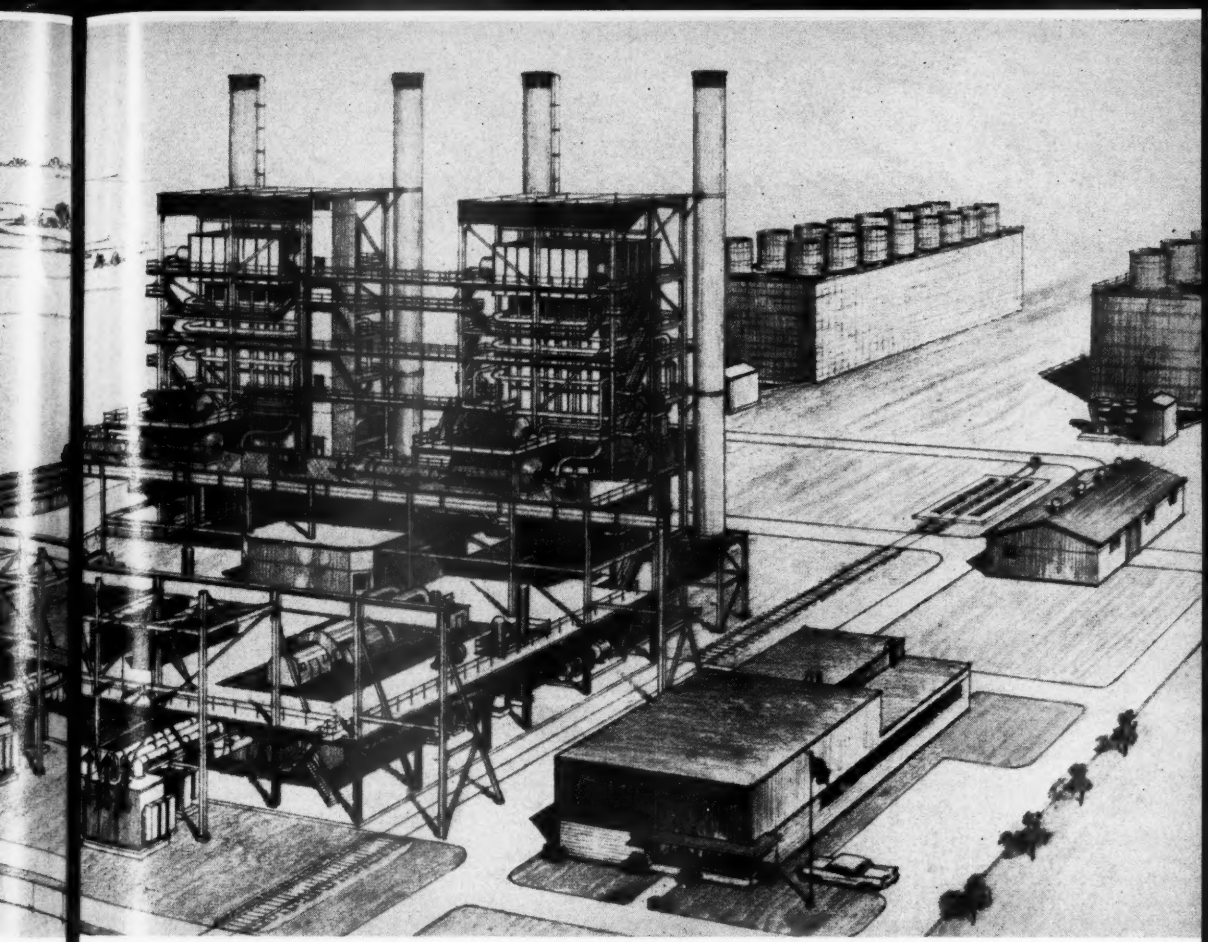
goes in

Recently placed into service by the Gulf State Utilit Company was the first 110,000-kilowatt unit at their ne Roy S. Nelson Station. Named for the presid nt of th company, this station is located at a fast-growing load ce ter approximately five miles northwest of Lak Charle Louisiana, on the south bank of the Houston River i Westlake, Calcasieu Parish.

A second identical unit at this station is sch duled t start-up later this year, while a third, of 162,000- w capac ity, will go into service early next year. The otal ge erating capability at the Nelson Station will e ventuall exceed 1,000,000 kilowatts.

Pla makin one ce ing, co of suff towers station by the Stea plied b A cros descri

ALL TYPES OF STEAM GENERATING, FUEL BURNING AND RELATED E UIPMEN NUCLE



S Nelson Station

to service

Plan and operating costs here have been reduced by making units 1 and 2 of the outdoor type, controlled from one central control room. As seen in the architect's drawing, cooling towers are installed to compensate for a lack of sufficient circulating water. Make-up to the cooling towers is zeolite-treated water from deep wells on the station site. The station was designed and constructed by the Stone & Webster Engineering Corporation.

Steam for the first three turbine-generators here is supplied by Combustion Engineering Radiant Reheat Boilers. A cross sectional elevation of units 1 and 2, and a brief description of their design, appear on the opposite page.

C-209

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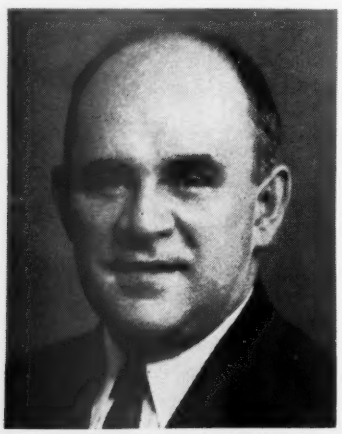
Pages with the Editors

THE science of high-voltage electric transmission has come a long way since the early days of Edison's Pearl Street station in New York city in 1882. Edison himself was rather skeptical about the economy of moving power great distances as long as the baby electric-generating industry of his time was confronted with the bottleneck of direct current limitations.

IT is hard to believe that in these days when voltage transmission lines are rated in six digits that it took conductor cables as thick as a man's thigh to pass power relatively short distances without serious line loss and voltage drop. Small wonder that the pioneers of the electric industry thought more in terms of building powerhouses where the power supply was needed than passing it around between states and larger geographical areas.

EVEN the introduction of alternating current and the gradual improvement in transmission technology brought only slow progress in the art of high-speed transmission. It has only been within relatively recent years that the six-digit brand of high-voltage transmission broke the barrier of general acceptance and usefulness. But now the utility of this phase of the transmission art appears to be opening up unparalleled opportunities for system interconnection and operating economies.



EDWARD A. FONTAINE

ARTHUR T. SONNENBERG

THE first article in this issue deals with this exciting development in the area of extra high-voltage transmission. It deals with the guiding principles that must be used for economic operations. Stated briefly, the whole purpose of pooling generating and transmission resources through "high lines" is to spread available excess capacity and excess transmission facilities around to various companies which can use them on an economic basis from time to time. But there are other dividends and benefits—the co-ordination of production schedules and maintenance schedules, the protection against various service hazards, and emergency pressures.

THE author of this opening article is an electrical engineer long identified with what he calls "Power on the Move." He is EDWARD A. FONTAINE, a native of Rhode Island and an engineering graduate of Brown University (BS, '38). That same year MR. FONTAINE joined the Stone & Webster organization, of which he is now manager of the electric department. During World War II he served as a Sig-

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nal Corps officer and he has also seen service with client companies on the West coast.

* * * *

THE recent news that the Washington transit tycoon, O. Roy Chalk, had seriously proposed to buy the New York city transit and subway system must have struck quite a few newspaper readers as one of those "man bites dog" items. First of all, one wonders why anyone would want to buy one of the most notorious pocketbook cancers that ever afflicted a city government, with operating deficits running annually into millions, not to mention labor problems and other headaches.

BUT the answer seems to be the same in the case of Mr. Chalk's proposal as in all programs for continuing private company operation. It will involve some measure of tax exemption simply to keep the wheels turning, regardless of whether the operation is public or private. But are such ideas workable as a method for stabilizing private industry in the transit business, or would they tend to spread to other essential industries having financial difficulties in operating?

DISCUSSING only the general urban transit problem in this light, we have in this issue (beginning on page 683) an article by another Washingtonian, ARTHUR T. SONNENBERG. He is on the staff of the District of Columbia Public Utilities Commission, and has given special attention to the problems involved in federal tax exemption and subsidy grants to private transit operators as an alternative to direct government operation.

MR. SONNENBERG is a graduate of George Washington University (AB, '46) and the University of Pennsylvania (MBA, '48). Prior to 1954 when he joined the District commission, he worked with several other federal agencies, including the Bureau of Public Roads, the Bureau of Internal Revenue, and the Interstate Commerce Commission. He also serves as the secretary of the Joint (D. C.-Maryland-Virginia) Commission to study passenger services in the Washington metropolitan area.

LINCOLN SMITH

BEGINNING on page 673 we present the first part of another in the series on vocational backgrounds for public service commissioners, by DR. LINCOLN SMITH of New York University. Following up his analysis of other professional backgrounds, DR. SMITH tackles the question of using so-called "laymen"—not associated with any learned profession or technical training—to assume the responsibilities of the regulatory function. In this first instalment he deals with some of the arguments in favor of using well-informed but nonprofessional people on our state regulatory bodies.

* * * *

IN our "What Others Think" department in this issue (beginning page 705) we are presenting a résumé of some of the exceptionally fine addresses and papers given at the recent annual convention of the Edison Electric Institute in New Orleans, April 6th to 8th. The high caliber of much of this material tempted us to reproduce as much of the text verbatim as we could reasonably square with the word "review." Fortunately, the text will be available to the readers of our esteemed contemporary, the *Edison Electric Institute Bulletin,* for more permanent record and complete information.

THE next number of this magazine will be out May 21st.

The Editors

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Coming IN THE NEXT ISSUE

(May 21, 1959, issue)

★

MODERN UTILITY PUBLIC RELATIONS ORGANIZATION PRACTICES

Virtually everyone in the public utility field is aware of the growing importance o specialized public relations organization of operating companies. But there are rela tively little data available about the comparative status of such organization and th changing pattern and trends which are taking place among the various companie During the past few weeks Francis X. Welch, editor of PUBLIC UTILITIES FORTNIGHT LY, has been conducting a survey in this field embracing not only electric companie but other utility companies as well. Questionnaire forms were sent to top executive and other officials of a number of these companies all over the country and a surprisinc ly high number of responses have resulted. On the basis of these answers, Mr. Welc has written an analytical article which should enable readers to compare compan organizations and practices, with which they are immediately concerned, with th overall pattern—or lack of pattern. They are likely to find the results not only interest ing and enlightening, but of real constructive benefit as a check against future plan ning and organization in this strategic area of management.

LAYMEN AS REGULATORY COMMISSIONERS. PART II.

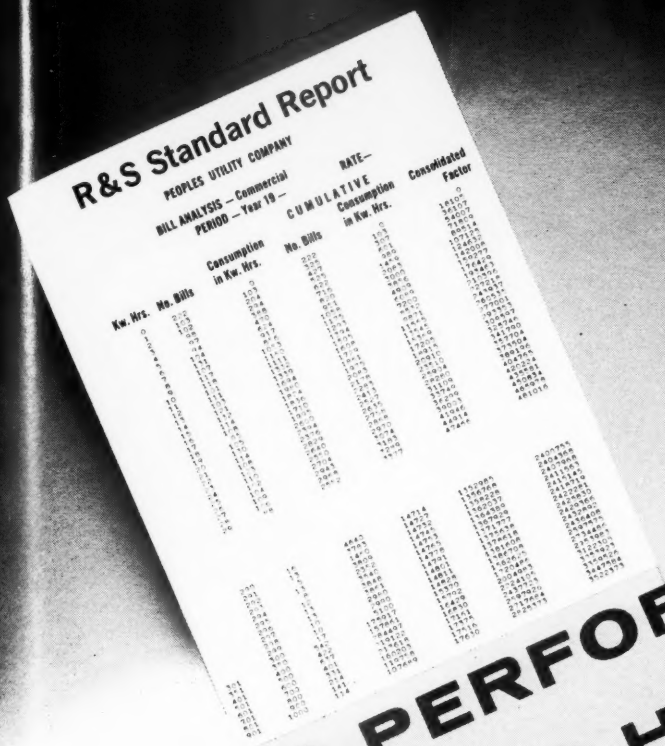
In this second instalment of a two-part series on the value of a so-called "layman's" background in the effective functioning of a regulatory commissioner, Dr. Lincoln Smith of New York University concludes an objective analysis of this question. And it is an important question, in these days of scrutiny and even criticism of commission regulation as it is practiced by the federal agancies in Washington. Dr. Smith is a scholar who has devoted a generous part of his career to the examination of the regulatory background. His previous studies have embraced a consideration of other professional backgrounds for regulatory commissions, ranging from lawyers through accountants, engineers, etc. By a "layman," Dr. Smith means a commissioner who has not been previously associated with any learned profession and has no particular technical or academic training. This second instalment deals with some of the negative arguments and problems involved in using nonprofessional commissioners. The first instalment, which dealt with arguments in favor of using the "well-rounded," "well-informed" layman on our commissions, appears in this (May 7th) issue.

NEW PROBLEMS FACING UTILITY MANAGEMENT

We frequently hear about the increasing pressures on modern business management, including, of course, public utility industry management. No one disputes this. But it can be greatly underestimated. The increasing responsibility for decisions from the top level down has snowballed during the past two decades for various reasons and in various areas simultaneously. There is the dynamic growth of sheer physical operations—the doubling of plant capacity; the doubling of customers; the doubling of service unit consumption per customer—all within a comparatively few years. Moving in from another area are the increasing requirements of regulation, new laws, new rules and regulations, and the constantly broadening jurisdiction of the commissions. But in still another area the pressure flares—the increasingly complex political and economic area in which we live. At the outset a utility executive was mainly concerned about his own service area community. Then the state capital. Then Washington, D. C., moved into his orbit of concern. Now world events have an impact on his own company operation. Alfred M. Cooper of Indio, California, a veteran commentator on business and management practices, has made some interesting general observations about this trend and makes a few practical suggestions as to what management can do to cope with

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others***



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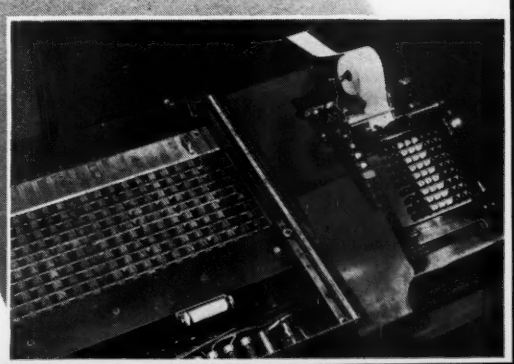

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EDITORIAL STATEMENT
Los Angeles Times.

"It is deeply disturbing that officials of a government which derives its powers from the consent of the people should seek to withhold information from the people. Yet thick files of evidence attest that officials do."

WILLIAM HENRY CHAMBERLIN
Columnist, The Wall Street Journal.

"The whole theory of representative government is that, while sovereignty resides in the people, with certain inalienable rights reserved to the individual, the practical exercise of many of the functions of this sovereignty must be entrusted to officials, selected in accordance with constitutional provisions."

JOHN W. HILL
Chairman of the board, Hill & Knowlton, Inc.

"The Russians are carrying on with relentless vigor the most brilliantly conceived public relations program in the world today. It has every element of good public relations except integrity and truth, which are not required under Communist ground rules. If they can succeed in planting ideas of suspicion and hostility toward America in the minds of enough people in the world the peril to us could hardly be exceeded by the dropping of an atomic bomb. The power of an idea is beyond belief."

DANIEL P. LOOMIS
President, Association of American Railroads.

"It is imperative that the nation get on with this job of putting some realism into government's transportation policies. America's railroads cannot resume their rightful position and make their fullest contribution under a policy which bleeds off rail revenues through blinding taxes, then applies these to the subsidy and promotion of competing carriers. This is a sorry way to run a railroad. In fact, I don't think the nation could have created any better way to *ruin* the railroads if it had set out purposely to do so."

ELMER L. LINDSETH
President, The Cleveland Electric Illuminating Company.

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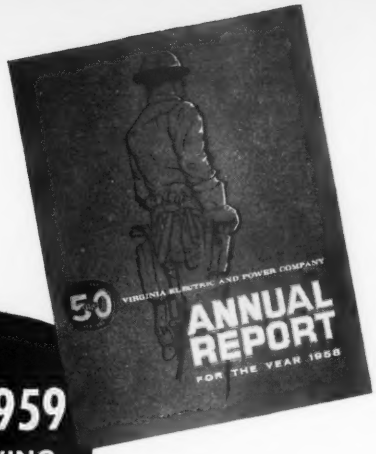

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Balance for Common Stock	$ 23,537,000	$ 1,821,000
Earnings per share (14,200,000 shares)	$1.66	$.13
Number of Customers	815,000	19,000
Electric Sales —thousands of kwh	6,683,000	496,000
Service Area Peak Load—kw	1,439,000	106,000
Gas Sales —thousands of cubic feet	6,814,000	1,592,000

50 YEAR 1909 1959

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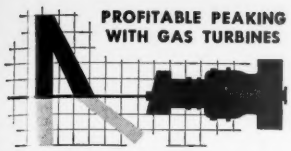
(left to right) Messrs. C. W. Elston, General Manager—Gas Turbine Department, G. B. Warren, Vice President and Consulting Engineer—Turbine Division, and W. S. Ginn, Vice President and General Manager—Turbine Division discuss advantages of a gas turbine peaking unit.



A decade of expanding peaking requirements for electric utilities

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Rapid peak load growth coupled with reduced steam cycle efficiency gains made in recent years have focused new attention on the costs incurred for providing added peak load capacity.

Today many electric utility systems are relatively saturated with steam turbines nearly as efficient as the latest units. This basic change in the economics of peak load generation dictates a renewed interest in low-investment gas turbines for a wide variety of peaking applications.

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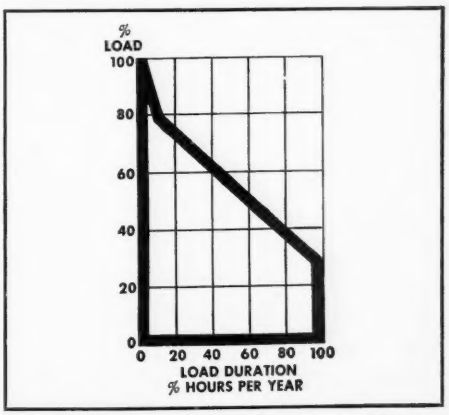

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Thursday—7 *Edison Electric Institute, Transmission and Distribution Committee, begins meeting, Washington, D. C.*	**Friday—8** *Pennsylvania Electric Association, Electrical Equipment Committee, ends two-day meeting, Bedford Springs, Pa.*	**Saturday—9** *Kansas-Missouri Telephone Associations will hold annual meeting, Kansas City, Mo. May 25, 26.* ***Advance notice.***	**Sunday—10** *National Planning Conference begins, Minneapolis, Minn.*
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Friday—15 *National Rivers and Harbors Congress ends three-day national convention, Washington, D. C.*	**Saturday—16** *National Coal Association will hold convention, Washington, D. C. June 3, 4.* ***Advance notice.***	**Sunday—17** *Industrial Heating Equipment Association begins meeting, Hot Springs, Va.*	**Monday—18** *Instrument Society of America begins annual symposium on instrumental methods of analysis, Houston, Tex.*
Tuesday—19 *Pennsylvania Gas Association begins meeting, Pocono Manor, Pa.*	**Wednesday—20** *Florida-Georgia Gas Association begins spring convention, Clearwater, Fla.*	**Thursday—21** *Natural Gas and Petroleum Association of Canada begins meeting, Hamilton, Ontario, Canada.*	**Friday—22** *Association of National Advertisers ends three-day spring meeting, Chicago, Ill.*

Electrical Spiderweb

The size of the workman inspecting this 175,000-kilowatt generator is accentuated by the immensity of the spiderweb-like unit which is part of the Lon C. Hill power station of the Central Power & Light Company near Corpus Christi, Texas.

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Power on the Move

By EDWARD A. FONTAINE*

The trend today in transmission lines is towards higher and higher voltages. They permit pooling of generating and transmission resources in a way that enables the nation's electric utilities to give better service, keep their operating costs down, and maintain rates at an economical level.

THE Cinderella of the electric utility industry — high-voltage transmission—is about to step out again, and in the view of many transmission men across the country, it is about time.

Not since the early days of the industry, when isolated power plants were being tied together into integrated systems, has there been so much public attention focused on the transmission of electric power as today. This is not to say that transmission has been derelict in its job, for the record will show that the transmission segment of the industry has been doing very well indeed. It should be sufficient to state that the product of the industry's efforts has been delivered. However, the headlines have gone to the production department with its glamorous new thermal power plants, larger and more efficient than ever, its awe-inspiring hydroelectric dams, and its fascinating nuclear-powered generating machines.

IN the industry's headlong rush to build the 500,000-kilowatt generator and the one million-kilowatt station, it may have been overlooked that transmission voltages were increasing apace. It must be admitted that holding open house in a new power plant or dining the board of directors in a boiler has far more popular appeal than any similar activity in connec-

*Manager, electric department, Stone & Webster Service Corporation, New York, New York. For additional personal note, see "Pages with the Editors."

tion with so utilitarian a piece of hardware as a transmission line. After all, the line produces nothing—it only delivers the goods. But, according to Schlitz's Law (the size of the pretzel factory increases in direct proportion to the output at the brewery), it will avail the generators nothing if the kilowatts cannot move to the market.

In any case General Electric's recent announcement of a research program in transmission voltages up to 750 kilovolts has marked another milestone in utility engineering history. At the same time transmission is getting from certain politicians the kind of additional attention that might be expected—a proposal, vigorously espoused, to interlace the entire U. S. with a super high-voltage power transmission grid.

These developments add more luster to old Cinderella and quite logically raise the question, "What is the need at this time for extra high-voltage (EHV) transmission?" Simply stated, it is the additional carrying capacity required to move the ever larger blocks of generation that are being produced to serve ever-expanding markets.

As our population expands from its present 175 million to an estimated 235 million by 1975, good power plant sites located near load centers will become scarcer. Existing sites with adequate cooling water and fuel supplies will be more fully developed than ever before, and as larger blocks of generating capacity are installed at a given location the delivery problems will become vastly more complex. Fundamentally these problems have been with the industry for some time. They concern themselves usually with whether there are enough tools available to embark on a "do-it-yourself" program or whether it is possible to get help from a neighbor.

Joint ventures with neighbors have involved the transfer and interchange of large blocks of power over considerable distances with strong, high-capacity ties required to do the job. Fast-moving load growth has also made its demands on transmission lines, pushing voltage levels upward through the years to their current 345-kilovolt plateau.

While 750-, 1,000-, and even 1,200-kilovolt transmission may seem spectacular by voltage standards in widespread use today, transmission men will tell you that their end of the business has always been spectacular, beginning with their very first assignment to interconnect two stations.

Early Transmission Developments

In the early 1920's there were few lines operated in excess of 200 kilovolts and these were then considered EHV circuits. A depression and at least one war tended to retard development. However, since 1951 when the first studies on 345-kilovolt transmission were conducted, nearly 3,000 miles of line in this voltage class in the United States have been completed and many other projects are in various stages of planning.

With the advent of interconnected systems, it became apparent in many instances that a large, centrally located power source with the economies inherent in a station that is favorably situated with respect to fuel and water supplies offered substantial savings, if the power and energy could be delivered to the points of utilization of several companies without

undue losses. Distance then became a very important element to evaluate due to the economic limit beyond which alternate means could provide lower-cost power.

The large hydroelectric developments in the 1930's focused attention on higher transmission voltages, for the single reason that these installations turned out large blocks of power and generally were remote from load centers. Hoover dam, the Columbia river, and TVA are prime examples. During this period 230 kilovolts became relatively commonplace and in 1936 a 287-kilovolt line from Hoover dam to Los Angeles was put into service.

Advances Since World War II

THE early history of EHV appears to have been associated with hydro developments because these installations were the largest blocks of generating capacity then in existence at a single station remotely located from load centers. Since World War II, however, advances in metallurgy have permitted sizable advances in operating steam temperatures and pressures. Now, the thermal stations are getting larger than the hydros and are located in nearly every region of the U. S. These larger blocks of capacity require bigger vehicles for transport. A desire to participate in the benefits associated with larger units caused by the steady increase in the size of generating units and a corresponding improvement in production economies prompted many companies to investigate pooling agreements whereby one utility would install a generator larger than it could economically justify by itself and sell a portion of its output to a neighbor. In turn, the same utility some time later often had to purchase reserve or relay capacity from neighbors to insure its load-carrying ability in emergencies. Such considerations necessitated stronger transmission ties and as the size of the blocks of power transferred and the areas involved increased, design thinking naturally was directed toward higher voltages.

LATE in 1952 fifteen companies in the Midwest formed the Ohio Valley Electric Corporation to provide 1,800 megawatts to the Atomic Energy Commission's plant near Portsmouth, Ohio. Four double circuit 345-kilovolt lines have been completed totaling 776 circuit miles, two each from the Kyger Creek and the Clifty Creek stations to the AEC plant.

In October, 1953, a 345-kilovolt line from the Philip Sporn plant in West Virginia to the Muskingum river station in Ohio was placed in service by the Ohio Power Company. This was the first line in North America to operate at over 300

¶ "THERE are many areas in this country adequately served by electric utilities that would not benefit for many years, if ever, from any additional linkage to 'outside' power resources if the true cost of providing these additional facilities were assessed. To install additional facilities or any other plant addition, the need for and use of which would be in the distant future, is uneconomic under American business principles. The cost of plant additions has climbed so rapidly in recent years that we cannot afford to have any segment lie idle. Fixed charges, the principal cost component of transmission lines, must be paid regardless of the use made of the equipment."

kilovolts on other than an experimental basis. It was preceded by exhaustive studies and tests which began in 1951 on a 500-kilovolt experimental line at Ohio Power Company's Tidd plant at Brilliant, Ohio, conducted by the American Electric Power Company and eight electrical manufacturers.

A 345-kilovolt line running from Sporn station to Kanawha station near Charleston, West Virginia, was the next link placed in service by the Appalachian Power Company and this was followed by a short tie connecting Sporn station to the Kyger Creek station of Ohio Valley Electric Corporation.

OHIO POWER COMPANY proceeded with a 345-kilovolt line running from Muskingum to East Lima, Ohio. Then Indiana & Michigan Electric Company joined with Ohio Power Company in the extension of this line, 73 circuit miles from East Lima to Sorenson, Indiana. From Sorenson, the Indiana & Michigan Electric Company continued the line to Tanners Creek station at Lawrenceburg, Indiana.

In 1957 a link between the Tidd and Muskingum stations was constructed by the Ohio Power Company. This line included two variations from earlier designs in order to study radio interference and lightning outage performance. Early in 1958 Commonwealth Edison's system was interconnected at 345 kilovolts with that of American Electric Power Company.

Bonneville Power Administration in the early 1950's conducted studies relating to higher transmission voltages in the Pacific Northwest. Limited rights of way through the narrow passes of the Cascade Mountains indicated that developments planned on the Columbia river east of the Cascades would present serious delivery problems for the load centers to the west. Bonneville today has several 287-kilovolt and two 345-kilovolt lines in service.

IN September, 1956, the McNary to J. D. Ross substation line was energized at 345 kilovolts, and in January, 1958, the line from Chief Joseph to Covington substation near Seattle was placed in service at 345 kilovolts. A line from Chief Joseph to Snohomish substation, about 30 miles north of Seattle, is designed for ultimate 345-kilovolt operation but has been operated at 230-kilovolt service since October, 1957. At present, Bonneville has in service or under construction 1,650 circuit miles of 287 kilovolts and 600 circuit miles of 345-kilovolt lines.

From the foregoing, it seems clear that transmission technology has compiled a remarkable record of achievement, the major portion of which has occurred in the brief period since the end of World War II. These and other transmission line developments have furthered the integration of our nation's power resources to the point where, according to Edison Electric Institute, we have nineteen major interconnected areas in operation.

Foreign Transmission Progress

A REVIEW of super transmission line developments would not be complete without mention of activities that have taken place in other countries. Russia is reputed to have about 1,110 miles of 400-kilovolt lines in service and there are plans to convert them to 500 kilovolts at some future date. Russian engineers claim

Tough Problems Posed by Super Voltage Lines

"LOOKING ahead to the day when these super voltage transmission lines will be a reality, our utility systems must include this eventuality in their long-range planning. The problems to be encountered will not be unlike those that have confronted the utility business for many years but their solution may be harder to determine. As an example, the designers of model super transmission lines tell us that they will require right-of-way width of at least 300 feet. With lands becoming increasingly difficult to acquire for power uses, hard work is ahead for the right-of-way departments. Radio and communication interference must be resolved to the satisfaction of all concerned before these high voltages are employed in our nation's backyards."

to have conducted extensive tests on 800-kilovolt DC transmission, and a 300-mile line from Stalingrad to the Don Basin is scheduled for 1962 service.

In October, 1957, the first 214-mile section of a 400-kilovolt grid was completed in Germany between Stuttgart and Cologne. Even prior to 1945, however, a 400-kilovolt system was under development in Germany.

The Scandinavian countries have done a great amount of work in the extra high-voltage range to deliver hydroelectric power produced near the Arctic Circle to the load centers on the Baltic and North seas.

In Argentina, a 380-kilovolt single circuit, 682-mile line is scheduled for 1962 and will deliver hydro power from El Chocon on the Limay river to Buenos Aires. A double circuit 132-kilovolt line presently under construction from Buenos Aires to San Nicolas will ultimately be converted to single circuit 345-kilovolt operation.

IN Canada, British Columbia Electric has been building extra high-voltage transmission lines since 1952. It has completed two legs of a triangular grid to feed Vancouver. The insulation of these is for 345 kilovolts but operating voltages have

been as high as 380 kilovolts. When completed, this grid will include 335-line miles of 345-kilovolt construction.

The Aluminum Company of Canada completed in 1954 a 50-mile, 300-kilovolt line from its Kemano hydroelectric project in northern British Columbia to its smelter at Kitimat. Two 95-mile, 345-kilovolt lines are scheduled for 1959 operation to deliver power from Chute des Passes in northern Quebec to Isle Maligne.

The Quebec Hydro-Electric Commission has selected 300 kilovolts as the transmission level for delivering hydroelectric power from its developments on the Bersimis river. The first double circuit line brought power from Bersimis 235 miles to Quebec City and an additional 150 miles to Montreal in December, 1956. In 1957 a second double circuit 300-kilovolt line from this plant to Quebec City was built, and a double circuit line to Montreal is scheduled for completion this year. When these projects and associated minor 300-kilovolt construction are completed, Quebec Hydro-Electric Commission will have 2,130 circuit miles of 300-kilovolt construction.

Operating Research Studies

MANY studies are presently under way to improve operating characteristics of 345-kilovolt transmission lines with respect to radio interference and lightning outage performance and to learn more about the effect of high altitude on present designs.

Additional studies are directed toward even higher transmission voltages. General Electric Company has recently announced a research program directed toward gaining knowledge and operating experience with voltages ranging from 460 to 750 kilovolts. Several other companies, including Western Massachusetts Electric Company, Stone & Webster Engineering Corporation, and Alcoa, are participating in this study.

Public Service Company of Colorado, in co-operation with Westinghouse Electric Corporation and five other manufacturers, has been studying high-altitude line performances at its Leadville project for elevations of two miles above sea level and voltages up to 500 kilovolts.

The Hydro-Electric Power Commission of Ontario is conducting studies on its Coldwater project for the delivery of the output of a potential one million-kilowatt plant on the Abitibi river in northern Ontario to Sudbury and Toronto. Voltages from 380 to 600 kilovolts are under consideration.

Studies are continuing on the use of DC power transmission in this country with which we have had limited experience. Although recent studies indicate that overhead DC transmission appears to be economically feasible, minimum distances of 400 miles and transmitted loads of at least 300,000 kilowatts will be required to produce an economic advantage over AC systems. Direct current transmission generally shows to advantage in the movement of the output of large hydro developments distantly located from load centers. This would limit the use of such lines in the U. S. since there are few undeveloped hydro sites of significant size remaining in this country.

What the Future Holds

ACCORDING to our transmission designers, the EHV transmission lines of tomorrow will appear in a radically dif-

ferent pattern than we are accustomed to seeing. Tower designs are undergoing transformation and the configuration of conductor spacing will undoubtedly differ from that now in use.

These advancements, together with new concepts of operation and still more intensive research, may some day result in a super high-voltage transmission grid linking the power resources of the entire U. S. However, any expansion in the EHV transmission system, as we know it today, must proceed carefully to prevent the imposition of an economic burden on the nation's electric consumers. Regardless of ownership, the justification for the vast amount of expenditures necessary eventually to provide full integration must be based upon sound economic considerations of the feasibility of each step.

THERE are many areas in this country adequately served by electric utilities that would not benefit for many years, if ever, from any additional linkage to "outside" power resources if the true cost of providing these additional facilities were assessed. To install additional facilities or any other plant addition, the need for and use of which would be in the distant future, is uneconomic under American business principles. The cost of plant additions has climbed so rapidly in recent years that we cannot afford to have any segment lie idle. Fixed charges, the principal cost component of transmission lines, must be paid regardless of the use made of the equipment.

Those responsible for the conduct of our investor-owned utility systems have been keenly aware of the economic gains afforded by interconnection with neighboring utilities, whether large or small. Their willingness to participate in joint operations, and to solve on a mutual basis the complex problems that arise when interconnections are considered, have contributed greatly to the progress made in the industry. The integration of our power supply facilities to date is as complete as economics justify. Further "tie-ins" are under consideration but their installation must await the results of favorable economic studies to prove their worth. We can expect more tie-ins to take place in the future, particularly between the larger systems which look forward to the developments of EHV transmission as a necessary tool in providing a more complete integration of their generating facilities.

Looking ahead to the day when these super voltage transmission lines will be a reality, our utility systems must include this eventuality in their long-range planning. The problems to be encountered will not be unlike those that have confronted the utility business for many years but their solution may be harder to determine. As an example, the designers of model super transmission lines tell us that they will require right-of-way width of at least 300 feet. With lands becoming increasingly difficult to acquire for power uses, hard work is ahead for the right-of-way departments.

Radio and communication interference must be resolved to the satisfaction of all concerned before these high voltages are employed in our nation's backyards.

Some Areas Won't Need High-Voltage Lines

THE power needs of many areas will be met for many years to come by local generation. If a super transmission grid

were imposed without economic justification upon a region that is and should continue to be self-sustaining, an oversupply of power could result by a doubling up of power supply.

To prevent the occurrence of a duplication in power supply, long-range load estimates for a particular region, calculated as accurately as possible for the foreseeable future, are a must. By the use of such estimates, power resources required to meet anticipated load growths can be determined to establish the justification for either local generation or transmitted power from other areas.

Inherent or peculiar problems to a given service area, such as the availability of cheap transportation facilities, made it more economic to carry thermal energy in buckets rather than electrical energy on wires. There are and will continue to be such differences among various regions with respect to power supply and power requirements. To link our interconnected power systems into a single interconnected system on an economic basis will require considerably more industry development and substantial changes in the load pattern of the nation. However, the evaluation of such a grid system is now taking place and, as in the past, the system will grow as the need for it increases.

UNDERLYING the expansion of the extra high-voltage transmission system must be adherence to basic economic principles if the public is to benefit by its installation. These concepts incorporate the purposes to which pooling of generating and transmitting resources are dedicated. They are:

1. To make available to others any excess in generating capacity above each member's own requirements at its economic value.

2. To make available to others any excess in transmission system facilities above each member's own requirements at its economic value.

3. To permit the co-ordination of production schedules to derive operating economies not otherwise possible.

4. To permit the co-ordination of maintenance schedules and to safeguard against conditions that might impair service to the consuming public.

THESE should and must be the objectives in the installation of transmission facilities to effect a further integration of our nation's power resources. Each has an economic value to contribute to the feasibility or nonfeasibility of any project. These principles have had long years of successful application in the utility industry. They have received the sanction of regulatory bodies, have overcome geographical barriers, and have proceeded regardless of ownership differences. The co-operative efforts of equipment manufacturers and utilities have aided immeasurably in the dynamic growth and technical progress of the industry. They have worked so well that the future course of the utility industry should be allowed to proceed unhampered by obstacles that could appear if other concepts were introduced.

Looking at past accomplishments and the intensive research and development activities under way or planned for the near future in EHV can lead but to the one conclusion that the industry is keeping pace with the transmission needs in the country.

Laymen as Regulatory Commissioners

By LINCOLN SMITH* Part 1

A well-rounded fund of knowledge, sound judgment, and good character are some of the attributes that laymen can use to good advantage as commissioners. Their lack of expertise is actually an asset, enabling them to administrate with responsibility while delegating authority for technical facts to their staff of specialists. Laymen, too, are usually better able to truly represent the interests of the public.

A PREFERENCE for laymen as commissioners on state utility agencies was noted in a careful study in 1929, which indicated a trend away from lawyers in favor of the "common man."[1] A follow-up twenty-five years later indicated that the trend had advanced moderately in the states.[2] Although this phenomenon is less significant in the appointment of federal commissioners, it nevertheless is a factor of some consequence.[3] The present analysis thus refers to the most important background numerically for state commissionerships.

The basic question under consideration is: Should regulatory commissioners be experts or nonprofessionals in the sense of not being associated with any specialized group or training? It is another instalment in the series on vocational backgrounds for top members of state and national regulatory agencies. Previous articles discussed trends for the selection of lawyers, accountants, engineers, and businessmen for these positions.[4] The conclusions were that members of those professions and vocations contribute expertise, but the suggestion followed that the most successful commissioners possess qualities over and above those of their occupations. The pages following will pursue a hypothesis that highly intelligent men of supreme virtue and integrity but whose training and experience are not geared specifically

*Assistant professor of political science, New York University, New York, New York. For additional personal note, see "Pages with the Editors."

to the substance of regulation may possess the innate ingredients demanded for the commissions.

A SCOTCH verdict is promised—inconclusive conclusions. Otherwise this treatise would be a net product of the writer's professional prejudices—subjective and presumptive. The purpose is to provide insight into a fundamental problem of public administration which far transcends commission work only. Pros and cons will be presented in an attempt to be provocative and encourage readers to use their own weighted judgments.

The word "layman" as used here is virtually synonymous with common man, well-rounded man, journalist intellectual, or "generalist." We might even say "amateur" were it not for the fact that commissioners must be paid and presumably were paid for whatever they were doing before they became commissioners. Professional administrators, experts in management, are distinguished from "generalists." The former are reserved for a later study.

The term "generalist" refers to men and women who are not versed in any one of the conventional areas of regulation, such as law, engineering, science, business, economics, and accounting. These people may be members of other callings, such as pharmacists, morticians, physicians, journalists, and clergymen—most all of whom are, or have been, on state commissions.

The classification embraces all commissioners who began their assignments not merely as new experiences but also without much knowledge of any phase of their work—they came in avocationally. Although some are members of a profession, it is one outside the realm of regulatory categories.

HOUSEWIVES could be included, as well as publishers and men engaged in ranching and agricultural pursuits. The so-called "Jack-of-all-trades," men with varied or miscellaneous experiences, come under the heading. Political service or activity, when separate from subjects pertaining to the substance of regulation, is relevant. The term "other government service," which was claimed by seventy-two state commissioners in 1954, is rather vague and difficult to classify. A great many of these commissioners began their service without special training of any kind. They are extremely pertinent here, inasmuch as previous studies indicated that almost all men must be in the stream of political availability before receiving serious consideration for commissionerships.

"General business" and kindred backgrounds are excluded from the totals, but some of these representatives must come in for categorical evaluation. Many commissioners from general business warrant inclusion in the layman class, because their fields are extremely remote from those of regulatory administration. Proprietors of general stores, dealers in antiques, and hardware merchants, for example, are businessmen, often successful ones, but their vocational qualifications for commissionerships are essentially those of amateurs at the outset.[5] Included in the definition are those few people who know little about the subject but who have delved into it, as a hobby or from exposure to elementary courses in public utility economics, regulation, or public administration.[6] In many of the smaller states such men

potentially are among the most likely candidates today for commissionerships, where otherwise politically acceptable.

The subject is practical and not academic as figures from previous years show. Out of 182 state and territorial commissioners in 1954, four were journalists, eleven represented "other professions," eighteen came from agriculture and ranching, and seventy-two from "other government service." Or, almost 58 per cent qualified as laymen. If only a few men from business are reclassified, this article is concerned with approximately two-thirds of the members of state commissions. Mr. Welch's study in 1929 showed that forty-three out of 162 state regulators clearly were "generalists" — five journalists, seventeen farmers, twelve industrial workers, and nine governmental employees. About 26 per cent of the state commissioners then were laymen, excluding any businessmen. Perusal of the two sets of statistics suggests that certain states traditionally show greater preference for layman-commissioners than others.

What They Want in Commissioners

PROFESSOR TROXEL has written that "Legislatures do not demand expert commissioners; they rely instead on men who have respectable general knowledge and can exercise 'good judgment.' "[7] Character is another prerequisite. These, he observed, follow "the tenets of democratic government."[8] The present writer once made the point that in a great many small states few citizens have opportunities to specialize in regulation.[9] Utility executives and their lawyers are precluded because they are interested parties and often not available or concerned with government service. Frequently the only available personnel are intelligent men of promise.

ANOTHER causative factor is what seems to be an almost innate hostility on the part of political leaders to place any reliance on experts at the administrative policy-making level. The traditional belief is that specialists, the need of whom is undisputed on commissions, should be hired as staff assistants and kept in subordinate places. This distrust of policy decisions by men who have concentrated skills stems from a cultural folklore prevalent in many sectors of American political thought. Wise or unwise, it represents the thinking of many voters in many states. Governors may have to pay some heed to it, regard-

"FOLLOWING in the political tradition, some governors are prone to insist upon a 'name' candidate for a post. The rationale is that a man who is in the public eye will lend popular political support to the administration and to the commission. The public is supposed to be favorably impressed with the selection, and a well-known man is apt to inspire confidence reciprocally in the electorate and on the agency. Thus, long public records are assets in the nomination and confirmation of candidates. . . . the fame of outstanding professional men is limited to occupational clientele; most are not politically well-known. Sometimes, however, appointing authorities prefer to balance a tribunal with at least one layman."

less of their convictions. As a corollary, specialists usually are products of several years of graduate study in universities. Although accepted professionally, there seems to be a suspicion of academic men for top administrative posts in many state political circles.[10]

ANOTHER fundamental attribute is that all potential regulatory commissioners must fulfill, in varying degrees, two qualifications already touched upon: (1) political acceptability, and (2) some undefined and undetermined standard of ability or basic understanding of the tasks ahead of a commissioner. The two characteristics are not mutually exclusive, and political leaders succeed very well in blending the two in most of their selections. When the first is considered at the expense of the other, public reaction often is unfriendly at the outset. A chief executive usually will counteract it before long with a second and better appointment. Almost never is professional fitness the sole basis for selection. Lack of political approval by appropriate leaders reflects fully as much against an administration as a purely political choice.

The quest, then, is for a commissioner who has a political personality commensurate with his intellectual capacities.

Following in the political tradition, some governors are prone to insist upon a "name" candidate for a post.[11] The rationale is that a man who is in the public eye will lend popular political support to the administration and to the commission. The public is supposed to be favorably impressed with the selection, and a well-known man is apt to inspire confidence reciprocally in the electorate and on the agency.[12] Thus, long public records are assets in the nomination and confirmation of candidates. If an appointee happens to be a lawyer, accountant, or engineer, all the better. But the fame of outstanding professional men is limited to occupational clientele; most are not politically well-known. Sometimes, however, appointing authorities prefer to balance a tribunal with at least one layman.

Due regard for political qualifications of commissioners is based further on a very important precept that much of regulation involves policies which depend in part upon political judgments. Within the areas of discretion opened up to an agency by legislative directives, commissioners must make a great many value judgments which constitute the political sense of direction to which a commission adheres at a given time. Hence, the scale of values of individual commissioners constitutes an integral part of the records of the agency. It is only logical that these views be conditioned by the political climate; otherwise, the commission would be insulated from political sensitivity and constitute an irresponsible bureaucracy contrary to the American political process. Hence, recognition of political aspects of appointments is in accord with the highest democratic standards.

Other Factors in Selecting Commissioners

LET us now consider laymen-commissioners more carefully, and note the professional rationale behind activities of the political authorities who select them. Reliance will be placed on opinions of a number of well-known authorities to supplement those of the writer. Objectivity is needed at this point.

Laymen Can Provide Regulatory Balance

"THE reasons for wanting laymen on commissions are many. The entire administrative decision-making process is involved . . . Regulatory administration is predicated on the tenet that three or more heads are better than one. Hence a good balance of talents is needed at the top level, and there is a real place for one or more 'generalists' to blend their contributory abilities with those of professional men in the composite work of the agency. Presumably, laymen will see the forest, whereas specialists at the top are likely to become preoccupied with the trees."

Certain underlying mental and temperamental qualities are among minimum requirements for laymen-commissioners. If raised, they would border on statesmanship. Character, independence, integrity, and maturity are axiomatic. [13] They possess high intelligence, keen perceptives, and common sense. Their optimism is apt to generate more breadth than profundity. They are practical men—realists as opposed to theorists. Philosophy and abstract thought usually for them are subordinated to common sense. Some are self-made men. Others were educated in liberal arts. They are predisposed toward free enterprise and American Capitalism. All are substantial citizens of some means and stature, with rôle and status in their respective communities, although they may come from either the white- or blue-collar class.

They do not qualify as scholars, but the better informed are aware of scholarship, its uses and its limitations. Many of them have more definite political opinions than the average voter. Some have served their government full time or part time in different capacities for varying lengths of time. Thus, they have valuable political contacts. Such is the type of person able to win appointment. Many are imbued with the concept of public service, but by no means are clamoring to be on the public payroll. The only common denominator of their means of livelihood is that they are not connected with any business, occupation, or profession which constitutes an integral phase of the regulatory process.

ONE great asset of the nonprofessionals is that they are gainfully and successfully occupied in some endeavor which is not indispensable to society and to the municipality.[14] In other words, their private vocations will not suffer much when they accept public office replete with political uncertainties. Their means of subsistence usually permits considerable freedom in moving between private and public employment. None are marginal employees, ne'er-do-wells, malcontents, or party hacks. Some, it is true, can make more money in public service than under self-

employment. But pecuniary gains rarely constitute the only motivation for the quest for commissionerships. Their aggressiveness in reasonable degrees is tempered, on occasion, with caution.

Like any prudent citizens, these people have their own opinions, prejudices, and predilections. Above all they have alert minds which simultaneously are open, flexible, inquiring, and analytical; but this does not mean that they are subject to whim and caprice. The most desirable have broad perspectives—wide realms of knowledge. They have a knack of sifting and weighing evidence, projecting and considering the sequences and consequences of alternative solutions, and making decisions. Public accountability and willingness to take responsibility for the results of lofty judgments do not worry them.

THEY not only know and understand men but also how to handle them. Ability to work with others as a team is fundamental. They have, in short, the intellectual qualities in the domain of liberal education, described by a well-known college president as "perspective, widened horizons, analytical ability, enlarged opportunities for comparison, or—if you please—vicarious experience, which is really another way of getting at perspective and horizon. This, if we can learn one another's language—is potential skill as a generalist."[15]

This partial list of attributes may not be common to a majority of voters, but fortunately a good segment qualifies on a combination of many of the counts. Excluding the maverick and occasional unqualified commissioner, it is from this sector that most of the laymen-commissioners under consideration here are elected or appointed to state tribunals.

Laymen Make Good Commissioners

THE reasons for wanting laymen on commissions are many. The entire administrative decision-making process is involved, only part of which can be presented now. Some of the political aspects already have been mentioned. Regulatory administration is predicated on the tenet that three or more heads are better than one. Hence a good balance of talents is needed at the top level, and there is a real place for one or more "generalists" to blend their contributory abilities with those of professional men in the composite work of the agency.

Presumably, laymen will see the forest, whereas specialists at the top are likely to become preoccupied with the trees. Professional training is prone to skip over human values and to evoke decisions based on logic, static formulas, conceptual tests, and cold, impartial precepts. This certainly has a place in public regulation. But there is a complementary and coextensive side to this aphorism. Administrative decisions should take into account, also, such matters as equity, compromise, "public relations," proper timing, and empirical considerations. Even sentiment is a factor of some little weight in democratic processes. Laymen are likely to help to effect some mutual concessions between the rational and irrational elements in an administrative decision.

THESE commissioners, in short, are not experts—they are appointed because they are not. What is more important, they are able to grasp significant issues, and

give direction to the work of the commission. They want principles and results—not details or techniques. Technical knowledge and expertise are necessary for all tribunals, but these are essentially functions of the permanent staff. The apolitical civil servants are well categorized in professional compartments below the policy-making level. Commissioners are unfamiliar with staff specialties, but they understand issues involved. Moreover, top men can see each phase of the segmentalized staff functions in its true relation to the others. This is perspective, an endowment which laymen are more inclined to possess in greater qualities and quantities than the professional specialist.

In addition, laymen are expected to have from previous experiences a versatility invaluable for overall recognition. Like the excellent swimming coach who scarcely can swim himself, many intelligent men can help to direct the affairs of a state regulatory agency without any perceptible knowledge of the minute tasks therein. These men will learn and grow on the job. Before long, some of them will have a surprising mastery of significant details. Their contributions, when coupled with those of one or two colleagues from the professions, will give sensible breadth and political understanding to the professional depth and definitive character of any regulatory agency.[16]

The writer's previous studies concluded that usually professional men were successful commissioners primarily because they brought in certain qualities over and above those of their professions, talents of a "generalist" which were acquired before they became specialists. They still were valuable for top assignments in spite of their expertise. This point was stressed by the late Commissioner Culbertson of the Tariff Commission:

> My judgment is that the best commissioner in the long run is the trained impartial individual who, when appointed, knows nothing about the tariff at all. . . . After all, the Tariff Commission employs its experts, and what you want in a commissionership is not a so-called expert on the tariff, but you want a man of broad appreciation and intelligent judgment and judicial attitude, who can take the facts that are furnished him by the experts and reach a sound decision thereon.[17]

Commissioner-staff Concepts

Much authoritative literature has been produced on commissioner-staff relationships. A few elementary concepts

¶ "ANOTHER argument for laymen-commissioners is that they alone truly represent the general public. Business and professional men are prone to project the interests of their own vocations on the agencies. Since they are steeped in a particular segment of the entire picture, they may see the public's problems through the astigmatism of their former associations. But a public service commission is created to serve public interests, if not to promote them. Laymen, who constitute a greater portion of the public than the sum total of the professions, are in positions to understand public needs and public welfare."

are noted. Ever present is the "need for striking a proper balance between the permanent and the political official. One gives expertness, continuity, and stability; the other gives freshness, new drive, and political responsibility. . . ." [18] But the layman belongs on top. "It has long been a cardinal principle of democratic government in the United States that the layman who represents the general public in his values and perspective must be superior to the expert and professional specialist in the administrative hierarchy." [19] John Dewey has pointed out that the task of the expert is to provide the factual data for the making of decisions. The special function of representatives of the public requires ability to judge the relevance of the knowledge supplied by others in relation to a broader perspective.[20]

Passing notice may be taken of the extremely vital kinship between laymen-commissioners and their staffs. No layman could long endure as commissioner without subaltern staff aid. But likewise not many commissioners from business and professions could get along without equally competent staffs. It is the same old story that commissioners make policy decisions, relying on specialists for factual data and recommendations. Theoretically, though, the layman's method in handling the span of control will be superior to that of many other men. His hierarchy will conform to that of layman to specialist. On the other hand, lines of communication and authority from the expert commissioner to his staff simmer down to one from expert to expert.

BECAUSE the layman does not know very much about details, delegation of authority (but not responsibility) to permanent staffs is his byword. He will not meddle with technicalities, not only because that is not his province but also because he lacks the dexterity to do so. Experts in public administration laud this procedure. The layman-commissioner, then, devotes his time and energies to broad policy patterns in the ambit of administrative discretion.[21] Failure of commissioners and staffs to recognize and respect mutually the prerogatives of the other is a common cause of friction, frustration, suspicion, and poor morale.[22]

Laymen Truly Represent Public

ANOTHER argument for laymen-commissioners is that they alone truly represent the general public. Business and professional men are prone to project the interests of their own vocations on the agencies. Since they are steeped in a particular segment of the entire picture, they may see the public's problems through the astigmatism of their former associations. But a public service commission is created to serve public interests, if not to promote them.

Laymen, who constitute a greater portion of the public than the sum total of the professions, are in positions to understand public needs and public welfare. The situations which confront commissions are their own, too. To the extent that public utility commissions should accede to public needs, laymen deserve the call to commissionerships.

In states where commissioners are elected rather than appointed, the agencies tend to be more "public minded." [23] Furthermore, voters often show preferences for lay commissioners.[24] After rela-

tively short periods of service, however, few of these commissioners remain laymen very long. Through sheer ability, ingenuity, and protracted length of service some of these men of promise graduate into a professional class—"professional amateurs." [25]

A WORD of caution is in order, lest too much is promised from the layman. With the addition of a few other qualities, it would be difficult to distinguish "generalists" from statesmen. And few state regulatory commissions attract statesmen. Yet a large number easily fulfill all four of Laski's tenets for statesmanship. He has written that the art of statesmanship ". . . seems to consist of four things. It involves knowledge of how to handle men, an ability to see the issues which need handling, a judgment upon their priority in importance, and the power and the courage to carry their proposed solutions to a successful issue." [26] Laski then went on to show that policy making depends upon power to co-ordinate, judgments of value, common sense, and predictions on psychological impact about which specialization has little peculiar relevance. "They are problems of a general direction, of a decision of the order of importance of the objective at which policy aims, of the probable effect upon opinions of making some particular decision." [27]

ALTHOUGH "generalist" and statesman are in part fused, they must not be confused. This point will be developed in the sequel of this article which will appear in the next issue of the FORTNIGHTLY. First, the most lucid arguments against laymen-regulators will be advanced. Then, attention will be devoted to the only alternative to laymen-commissioners—the strengths and limitations of experts in commissionerships. Finally, a short synthesis will be offered on laymen *versus* expert commissioners.

Footnotes

[1] "The Trend from Lawyers to Laymen as Commissioners," by Francis X. Welch, PUBLIC UTILITIES FORTNIGHTLY, December 26, 1929, p. 801.

[2] "Trend from Lawyers to Laymen on State Commissions," by Lincoln Smith, *ibid.*, November 11, 1954, p. 630.

[3] *"Federal Commissioners,"* by E. Pendleton Herring (Cambridge, 1936), p. 114. "Professional Qualifications of Federal Regulatory Commissioners," by Lincoln Smith, PUBLIC UTILITIES FORTNIGHTLY, Part I, November 25, 1954, p. 683; Part II, December 9, 1954, p. 752.

[4] The articles, by the writer, may be located as follows: "Lawyers as Regulatory Commissioners," *George Washington Law Review,* March, 1955; "Accountants as Regulatory Commissioners," PUBLIC UTILITIES FORTNIGHTLY, January 17, 1957, p. 93; "Engineers as Regulatory Commissioners," Part I, *ibid.*, November 7, 1957, p. 718; Part II, *ibid.*, November 21, 1957, p. 846; "Businessmen as Regulatory Commissioners," *The Journal of Business,* April, 1958.

[5] Allowance is made, of course, for their familiarity with business techniques, many of which are invaluable but only tangential on regulatory tribunals. They approach their public tasks merely with peripheral affinities between private business and public regulation, and an eagerness to learn the latter on the job.

[6] In some of the smaller colleges, many men who teach these courses still rank as amateurs, because they are expected to keep one jump ahead of students. The large universities, however, reserve these courses for specialists.

[7] *"Economics of Public Utilities,"* by Emery Troxel (New York, 1947), p. 80.

[8] *Ibid.*, p. 81.

[9] "Recent Trends in the Appointment of Commissioners," *Ohio State Law Journal,* autumn, 1952.

[10] The prejudice has softened in the national government in recent decades.

[11] One danger is that individual or party pressures may give undue weight to "politics"—rewarding defeated candidates with administrative posts or even using them for paying political debts.

[12] Of an analogous situation ex-President Truman has written: "I consider political experience absolutely necessary, because a man who understands

politics understands free government. Our government is by the consent of the people, and you have to convince a majority of the people that what you are trying to do is right and in their interests. If you are not a politician, you cannot do it." *"Memoirs,"* by Harry S. Truman, Vol. 1, *"Year of Decisions"* (New York, 1955), p. 328.

[13] "Men of independence and mental grasp . . ." The phrase, not its application here, is from *"Modern Arms and Free Men,"* by Vannevar Bush (New York, 1949), p. 157.

[14] "People in political positions are necessarily expendable, and in the event of controversy, the expert with all his experience may have to step aside if he has also been fulfilling a political function high in the administrative hierarchy. The principle of lay leadership in administration is a safeguard to both the public and to the professional civil servant." *"Regulative Agencies."* Report of the Survey Unit No. 9 to the Commission on State Government Organization, Connecticut. By George A. Graham, Marver H. Bernstein, and D. G. MacDonald (November 21, 1949), p. 20.

[15] *"On Re-Thinking Liberal Education,"* by Harry D. Gideonse (American Council on Education, Washington, D. C., 1953), p. 35.

[16] Here is a highly pertinent description of the well-rounded man: "He will be a generalist who will not think in terms of specific work but in the science of making other people work. In the old sense of work, he does not work; he encourages others to work. He does not create; he moderates and adjusts those who do create. Primarily he is the balance wheel on the tendency of the professional-type individual to wander into new, unexplored, and perhaps dangerous territory." *"The Organization Man,"* by William H. Whyte, Jr. (New York, 1956), p. 135.

[17] Quoted in *"Public Administration and the Public Interest,"* by E. Pendleton Herring (New York, 1936), p. 101.

[18] *"Administration of National Economic Control,"* by Emmette S. Redford (New York, 1952), p. 368.

[19] Graham, Bernstein, and MacDonald, *op. cit.*, p. 19.

[20] *"The Public and Its Problems,"* by John Dewey (New York, 1927), p. 208. This excerpt is illustrative: "Inquiry, indeed, is a work which devolves upon experts. But their expertness is not shown in framing and executing policies, but in discovering and making known the facts upon which the former depend. They are technical experts in the sense that scientific investigators and artists manifest *expertise*. It is not necessary that the many should have the knowledge and skill to carry on the needed investigations; what is required is that they have the ability to judge of the bearing for the knowledge supplied by others upon common concerns."

[21] President Truman made the point quite effectively that top officials in the public service must "spend most of their time in studying matters of policy." They need to be supported by staffs of skilled career administrators. Quoted in *"The Truman Administration,"* by Louis W. Koenig (ed.), New York University Press (1956), p. 50.

[22] "In commissions the staff experts are rarely balanced by commissioners who possess not the detailed knowledge of the expert but the aptitude for gauging the public need and for integrating the points of view and proposals of the experts into a policy in the public interest." *"Regulating Business by Independent Commission,"* by Marver H. Bernstein (Princeton, 1955), p. 124.

[23] "Should Public Utility Commissioners Be Elected or Appointed?", by Lincoln Smith, PUBLIC UTILITIES FORTNIGHTLY, Part I, April 28, 1955, p. 485; Part II, May 12, 1955, p. 542.

[24] In 1954, for example, laymen in a broad sense were represented on commissions of all elective states except Louisiana, Tennessee, and Virginia. The list included Alabama, Arizona, Florida, Georgia, Iowa, Kentucky Railroad Commission, Minnesota, Mississippi, Nebraska, New Mexico Corporation Commission, North Dakota, Oklahoma, South Carolina, South Dakota, and Texas.

[25] The phrase, not its application here, is from *"Professional Amateur, The Biography of Charles Franklin Kettering,"* by T. A. Boyd (New York, 1957).

[26] *"Democracy in Crisis,"* by Harold J. Laski (Chapel Hill, 1933), pp. 79, 80.

[27] *Ibid.*, p. 172.

Part II of this article will appear in the next issue of the FORTNIGHTLY.

"ONE of the self-evident truths that led to this country's founding is the right of every man to pursue his happiness in his own way so long as it doesn't wrong his neighbors. . . . There are lots of . . . people who would like to have the government pursue their happiness for them so that they don't 'have to work to get it.'

"Government, though, cannot guarantee happiness. And the country would be far better off if it came again to see what was once a self-evident truth—that pursuit of happiness meant a man's right to seek it and not a government responsibility to provide it. When we come to see that, we will see also what a strange twist has been given the old American dream."

—EDITORIAL STATEMENT,
The Wall Street Journal.

New Federal Tax Treatment *for TRANSIT*

By ARTHUR T. SONNENBERG*

High federal taxes are forcing more and more transit companies into public ownership. National tax reforms are needed to put private transit on a more equal footing with public transit. Under the present tax setup, state and local governments are reluctant to grant transit subsidies or tax relief. Reduced federal taxes would benefit the riding public, make regulation easier, give private transit new life and incentive.

THE chronic ills of urban mass transit have been too well publicized to require a detailed recounting. It is sufficient to note that after the end of World War II urban transit companies were caught in a squeeze between declining gross revenues on one hand and increasing unit operating costs on the other. The overall results of transit's economic plight were (1) increases in passenger fares and (2) severe cutbacks and restrictions in the services provided by the transit operator. In other words, the passenger was continually being asked to pay a higher price for an inferior product.

There were limits to the amounts of financial relief which an individual transit operation could realize by raising fares or cutting back services. Public resistance to rate increases or curtailed operations reduced the margin of superiority which mass transit enjoyed over all other forms of transportation as the most efficient carrier of large numbers of passengers within highly developed areas. The growth of automobile ownership and use within metropolitan areas further reduced the attractiveness of transit for the average rider by lowering practical operating speeds.

THE increase in automobile use had one beneficial by-product for private transit operators. Confronted with an almost impossible bill for highway and parking facilities, state and local officials were forced to make a more realistic and nonpolitical appraisal of the value of the mass transit system to the local community. Transit, which had been politically kicked almost to death prior to World War II, began to display certain inherent civic values that were worth preservation.

More attention was focused upon the needs and the complaints of the transit operator. Particular concern was devoted to the tax burdens imposed upon transit operations. Major reform legislation needed to exempt the private transit oper-

*Transit co-ordinator, District of Columbia Public Utilities Commission, Washington, D. C. For additional personal note, see "Pages with the Editors."

ator from archaic state and local taxes was introduced and, in numerous instances, actually enacted.

The major public financial aids to transit fall into three broad categories: (1) increased rates; (2) relief from state and local operating taxes; and (3) outright public subsidies. The initial effect of any one program is to provide a greater amount of revenue to the operating company. However, before the transit investor or management can realize any benefits in the form of higher net earnings, it is necessary to pay corporate income taxes.

UNDER existing statutes, 52 per cent of any increment to taxable net income belongs to the federal government. The state or local government, individually or in combination, may take another 5 per cent of any increase in transit earnings. Insurance contracts or self-insurance laws may dictate that 2 to 5 per cent of the original increase in gross revenues be paid out as premiums or set aside in some corporate reserve.

The net result of fare increases, tax relief, or subsidy programs is frequently that the private transit firm which has the most demonstrable need for financial assistance gets only 40 per cent or less of the total relief provided. Sixty per cent, and sometimes more, accrues to governmental bodies or nontransit organizations. The major villain in the picture is the federal government, because its 52 per cent bite is such a large portion of the total nontransit diversion.

The Rôle of the Federal Government

FEDERAL tax legislation has constituted a prime obstacle to the spread of state and local programs to provide financial aid to transit. Local and state officials are naturally reluctant to forego tax revenues derived from transit or any other source. They become even more reluctant, if not downright opposed, when it becomes apparent that 52 cents out of every tax dollar given up by their jurisdictions will go to the federal treasury rather than to the local transit operation.

Despite the efforts of state and local governments to preserve private transit, the federal government has begun to assume the rôle of an umpire who appears ready both to call the third strike and to throw the private investor out of the transit game.

THE alternative to tax relief, subsidies, or fare increases for local mass transit has all too frequently been public ownership and operation of the facilities. The surface virtues of public transit operation are readily apparent to the parties to the transaction: (1) Public ownership guarantees an even greater tax exemption (from federal as well as state and local imposts) than that sought by the private transit operator; (2) public ownership gives the private investor a chance to recover his capital under circumstances which have certain federal income tax advantages applicable to either his transit holdings or to his other investments; and (3) public ownership has a certain political appeal, especially if the transit operator's public relations are at the low ebb which must be regarded as normal. In the drift to public transit ownership which has probably now reached the proportions of a trend, the federal government has become an unwitting, and, possibly, un-

willing partner through the operation of its corporate tax statutes.

THE flight of municipalities to public ownership and operation of transit facilities is undesirable on two counts. First, public ownership, by itself, is no panacea for mass transportation's current ills. Second, there is an ever-present temptation for the public managers, when the profit motive is lacking, to replace cost analysis with some other yardstick marked off in units of political expediency.

It is necessary, unfortunately, to observe at this point that the shift to public transit ownership has frequently been the result of local reaction to speculative practices of private management. One unfortunate effect of transit's economic ailments has been the attraction they have generated for financial manipulators. These speculative groups have been able to purchase faltering transit properties at near bankrupt prices. Handsome and frequently tax-free capital gains may be realized by a subsequent sale of the same company, after it has been stripped of its most marketable assets. to a municipality or public corporation. In some instances, the later inflated values seem to represent nothing more than a capitalization of the ill will which the speculative operations have engendered.

If it is assumed, however, that there are some inherent values in private operation of transit facilities which are worthy of preservation, there are two major steps which the federal government could take to give the private segment of the transit industry a much-needed breathing spell. Both steps entail some revision of federal corporate tax law as it presently applies to the transit industry. Either one of the measures would assist greatly in the maintenance of a private local mass transit industry.

Treatment of Nonfederal Financial Aids

IN the first instance, Congress could enact tax legislation specifying that any income derived by a transit firm as the result of a state or local subsidy grant, tax remission, or relief statute should be excluded from gross income when determining corporate taxable net income. This provision would guarantee to local transit companies almost the full benefit of any financial relief granted by state and local authorities.

The actual monetary amount of the tax benefit would not be difficult to determine. In the case of a public subsidy, the amount would be specified in the subsidy legislation or it would be related to or determined by some aspect of the transit firm's actual operations, such as vehicle miles, hours, or total passengers carried. In the more prevalent state and local practice of granting the transit company relief from certain

"THE net result of fare increases, tax relief, or subsidy programs is frequently that the private transit firm which has the most demonstrable need for financial assistance gets only 40 per cent or less of the total relief provided. Sixty per cent, and sometimes more, accrues to governmental bodies or nontransit organizations. The major villain in the picture is the federal government, because its 52 per cent bite is such a large portion of the total nontransit diversion."

existing taxes, the amount of the federal gross income exemption could be established by estimating the company's state or local liability in the absence of the relief legislation.

THE proposed legislation would set aside a certain amount of corporate income as federally tax-exempt, when the local private transit firm was granted tax or other fiscal relief by state or local jurisdictions. Federal legislation of this sort would remove one of the present major obstacles to securing needed financial assistance for the private segment of the transit industry.

Although a portion of a local transit company's revenues was exempted from federal income taxes, any net income benefits could properly be considered by the regulatory commission as a portion of total net earnings in cases involving the firm's rates and return. Thus the federal tax exemption would benefit the rider as well as the private transit operator by helping to hold the line against fare increases. It would also permit state and local officials to make a more realistic appraisal of the desirability or need for transit subsidies measured against the desirability or need of maintaining privately operated local transit enterprises. It would permit a fairer evaluation of the relative advantages of private and public transit operation by vesting the private company with certain tax advantages now available only to public enterprises.

Recognition of a Depressed Utility

THE second major tax revision which the federal government could undertake involves the creation of a new class of corporate taxpayer which would fit the needs of the private urban transit firm. Federal tax laws operate presently to lessen the burden of a temporarily depressed corporation by permitting net losses to be carried back two years or carried forward for five years. Some similar concern might properly be manifested for a member of a chronically depressed, publicly regulated industry, such as urban transit, which because of franchises, certificates, contractual commitments, or simple public necessity cannot be permitted to cease operations.

The suggested federal corporate income tax change would follow a pattern set out in World War II excess profits tax legislation. Qualifying corporations would have the option of filing under standard tax statutes or under new provisions. The proposed legislation would permit qualified firms a certain allowable return based on either the depreciated value of useful assets or gross operating revenues. The allowable return would be either completely tax-exempt or taxed at some nominal rate, say two per cent. Earnings in excess of the stipulated return, on the other hand, would be taxed by the federal government at rates above the present 52 per cent, say 75-90 per cent.

NATURALLY, certain legislative safeguards would have to be included in the proposed federal corporate tax revision. Qualifications would be a matter of major importance. The creation of any special class of corporate taxpayer by federal statute would encourage demands for similar preferential treatment by all types of depressed businesses. Economic depression, of itself, would not be sufficient justi-

NEW FEDERAL TAX TREATMENT FOR TRANSIT

Federal Taxes Stymie State and Local Transit Aid

"FEDERAL tax legislation has constituted a prime obstacle to the spread of state and local programs to provide financial aid to transit. Local and state officials are naturally reluctant to forego tax revenues derived from transit or any other source. They become even more reluctant, if not downright opposed, when it becomes apparent that 52 cents out of every tax dollar given up by their jurisdictions will go to the federal treasury rather than to the local transit operation. Despite the efforts of state and local governments to preserve private transit, the federal government has begun to assume the rôle of an umpire who appears ready both to call the third strike and to throw the private investor out of the transit game."

fication. Some showing would have to be made of: (1) a public need for the corporation's unique output; and (2) the statutory environment in which the industry operates. Qualifying corporations would have to be engaged in performing an *essential* public service, subject to regulation by a duly constituted regulatory body. The corporation's rates, services, and earnings should be matters of public knowledge, subject to regulatory review.

THE proposed tax change would require certain additional administrative provisions. Since the allowable return would be related to depreciated asset values or operating revenues, those items would have to be certified as correct to the Internal Revenue Service, probably by the regulating commission. In view of the fact that the allowable return would be nearly or completely exempt from federal income taxation, interest payments should probably be regarded as nondeductible expense items.

In order to prevent one-year tax bonanzas or to forestall financial maneuverings for federal income tax advantage, corporations electing to file under the proposed option might be required to file under the same option for at least the immediately following tax year.

With the suggested administrative safeguards, the proposed tax change possesses

the advantage of granting to the urban transit industry some federal fiscal recognition of the economic and regulatory conditions under which it must presently operate. Revision of federal corporation taxes applicable to the transit industry would afford some surcease to harassed regulatory commissions confronted with the knowledge that a 6 or 7 per cent net income after income taxes may represent an unattainable 12 to 15 per cent return before taxes. The elimination of interest payments as a tax deductible item would also bring federal tax procedures more in line with current regulatory practices.

EITHER one or both of the suggested federal tax reforms would constitute a major forward step by Congress and the administration in recognizing the vital services rendered by the transit industry to the nation's expanding urban areas. It would reaffirm the traditional federal faith in the ability of private capital to conduct mass transit operations by equating to some degree the tax positions of private and public ventures.

Federal tax exemption of relief or subsidy grants to private transit operators would encourage state and municipal governments to extend such concessions. The overall effect of the proposed tax changes would be to eliminate the federal government as a major motivating force towards public ownership and operation of urban mass transit facilities.

Blessings in Disguise

"WHILE the late recession has gone largely unlamented, some good things did come out of the hard necessities imposed by it. Two of these seem especially important.

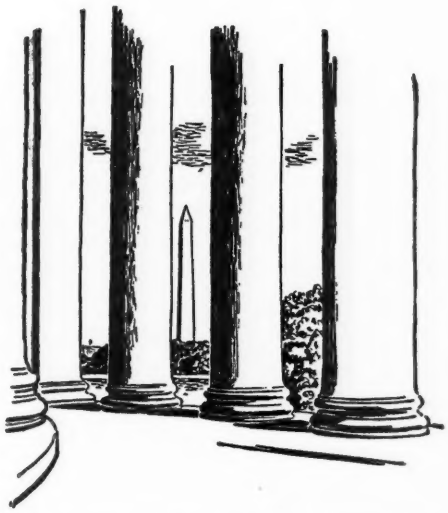
"One involves the obvious benefits that come from being forced to eliminate sources of waste that might have gone unnoticed in better times. Many companies have come out of the recession more trim and fit than they have been in years, and better able to make the most of good times. A second and related benefit is perhaps even more far-reaching. The economic pressures of the recession created a kind of management testing ground on which the men were separated from the boys, and those with what we call 'Managerial Maturity' stood head and shoulders above their associates.

"With profits squeezed between dropping sales and rising costs, managers at every company level had to make difficult decisions promptly, and with the knowledge that the ill effects of an unwise decision would be felt sooner and more seriously than they would in boom times. . . .

"The recession has given many companies a more accurate inventory of their real managerial potential—or lack of it—than they could have obtained in any other way."

—W. F. ROCKWELL, JR.,
President, Rockwell Manufacturing Company.

Washington and the Utilities



Will Ike Be Sustained?

THE size of the vote (254 to 131) by which the House of Representatives passed the anti-Benson bill to strip the Agriculture Secretary of his power over Rural Electrification Administration loans raises for the first time any real doubt about the ability of the administration to sustain the veto of a major congressional bill by President Eisenhower. The Senate had already voted by more than the two-thirds vote (60 to 27) to approve the so-called Humphrey-Price Bill.

In the House the vote fell a scant two votes short of the necessary two-thirds majority needed to override. Speaker of the House Sam Rayburn probably could have mustered two votes, and more, on the day of passage of the bill through the House. But he was no doubt keeping the real strength of the majority under wraps until the crucial test on the veto. Republicans, on the other hand, were pretty sure that, on the showdown, they could even reduce the majority for the bill in both houses. It is not at all uncommon for Congressmen in favor of legislation to reverse their stand when the question is on the sustaining of a presidential veto.

The uncertainty of the Humphrey-Price Bill, however, lies in the fact that the vote in both houses was heavily partisan, according to the division. Only a handful of Republican Senators from the farm states joined the Democratic majority in the Senate roll call, whereas only two Democratic Senators turned up on the side of the Republican minority.

THE National Rural Electric Co-operative Association is expected to mount a drive for overriding the anticipated veto. If it is successful in turning this trick, the co-op lobby would obtain a prestige of influence hardly rivaled since the days of the Anti-Saloon League. Even the strongly organized labor groups have yet to beat Ike on a veto.

It is generally assumed that the White House will veto the bill since it amounts so very definitely to a slap at his chosen Cabinet officer, Secretary of Agriculture Benson. Minority Leader Dirksen (Republican, Illinois) called on the White House to veto the measure on grounds that it would reverse general policies recommended by the Hoover Commission for better government operations.

But the Republicans in Congress had another and more personal reason for denouncing the bill. They said it was simply a spite measure with which the Democratic leadership is trying to make good on political promises to the National Rural Electric Co-operative Association.

No Change in REA Policy Likely

THE short-range effects of the bill do not appear, on the surface, to be very important. Under department regulations, REA Administrator Hamil is subject only to Secretary Benson's veto in approving loans of more than a half-million dollars. Furthermore, Hamil has testified that, as a practical matter, he has not been reversed and would continue to work harmoniously with Secretary Benson until the end of the term of the present administration. After that, regardless of whoever is elected President in 1960, there will be a new Secretary of Agriculture (Democratic or Republican as the case may be). Indeed, it is also possible that there will be a new REA Administrator, although Hamil is serving under a ten-year term.

President Eisenhower "accepted" the resignation of REA Administrator Wickard (originally appointed by ex-President Truman) before the end of his (Wickard's) term. Under the Morgan decision, involving the firing of a TVA director by the late President Roosevelt, it is generally assumed that the REA Administrator's term does not mean very much when there is a turnover in White House occupancy.

The administration justifies the Agriculture Secretary's supervision of REA loans as ordinary good administrative practice. Oddly enough, a Republican, Senator Curtis (Nebraska), wanted to go even further than the Humphrey-Price Bill and have REA divorced entirely from the Agriculture Department. This would restore the independent status for REA which prevailed prior to 1939. But the Senate voted down Curtis' amendment. This left for passage the original Humphrey Bill, which would simply authorize the REA Administrator to make loans without supervision or control by the Secretary of Agriculture, as long as such loans were covered by REA appropriations.

NRECA General Manager Clyde T. Ellis urged pasage of the bill before a House Government Operations subcommittee. He said it was necessary because Secretary Benson had a "master plan" for destroying the present REA program. He said such a law would save the program and rescue REA Administrator Hamil from the domination of the Secretary of Agriculture. Hamil, of course, already had testified that he did not want to be rescued and that not "in a single instance" has Benson interfered with the REA program.

Hamil has also denied that Benson's administration of REA affairs has ever been "motivated or colored by political considerations."

If and when President Eisenhower does veto the bill, he may accompany it with a stinging message of criticism. Secretary of Agriculture Benson already has said—in urging defeat of the bill in the House—that it was "inconceivable" that he should be charged with the responsibility of administering the affairs of a bureau over which he had absolutely no fiscal control.

Armed with the arguments of the Hoover Commission on good administrative practices, plus the criticism of spite legislation aimed at one man, and the charges of paying political debts, the stage seems set for some caustic description of the bill

of an incisive character to which President Eisenhower is not usually accustomed.

If finally enacted, the bill would restore to the REA sole authority to pass on rural power and telephone loans. It would leave the REA under the Agriculture Department for general administrative purposes. Until 1953, when President Eisenhower advocated and Congress approved a reorganization plan, the Administrator had the final word on loans.

FPC Needs More Money

ABOUT the only conclusive and indisputable thing which can be said concerning FPC Examiner Zwerdling's decision in the Phillips Petroleum producer rate case is that it weighs a little over a pound and a half. Otherwise, you can find almost any shade of opinion throughout the regulated gas industry and among others interested in producer regulation by the Federal Power Commission.

But there is probably a majority reaction to the effect that the formula for regulating the producer rates of the Phillips Petroleum Company devised by Examiner Zwerdling is not going to result in any sudden shattering of the bottleneck which has caused 2,200-odd producer rate cases to pile up on the dockets of the FPC. Although Examiner Zwerdling made a valiant effort to find a practical and just modus operandi for carrying out the commission's responsibility under the Natural Gas Act, he was, after all, writing his opinion only for the Phillips Petroleum case.

Furthermore, he disclaimed any attempt to write an exclusive or uniformly applicable formula, despite all the advance billing of the Phillips case as a "key" or "test" in other similar decisions. On top of that, with the fastest timetable imaginable, it seems unlikely that Zwerdling's opinion can proceed through the almost inevitable stages of FPC review, appeal, argument, and decision in the United States circuit court of appeals, and ultimate petition for review in the United States Supreme Court, much before the end of 1960.

So, whatever way one wants to figure the Phillips decision, the FPC is still going to have plenty of wood to saw in its own backyard. Also, it was not surprising to learn that the FPC is seeking more money for more man power to reduce the expected work load of natural gas cases. The commission figures it will need $3,747,100 for handling gas cases in the year beginning July 1st—an increase of $192,600 over current year funds. The estimate was given in House testimony by Jerome K. Kuykendall, commission chairman.

"Our carry-over of rate cases remains very large, primarily due to our receipt of more cases than anticipated," he said, adding that the requested increase in funds simply would enable the commission to put on staff additions already authorized by Congress.

In the fiscal year ended last June 30th, Kuykendall testified, the commission had expected to receive 200 rate cases from independent gas producers but the total was 708. He said the FPC anticipated 600 rate cases in the current fiscal year, ending next June 30th, but nearly 500 were filed in the first six months of the year. Kuykendall said the proposed staff increase would permit "a modest start toward reducing the carry-over of rate cases to fiscal year 1961." No increase in the number of employees is needed for work in connection with applications for certificates to provide natural gas service, he said. Despite receipt of about 1,700 such applications each year, he said the carry-over of such cases should drop from 2,209 to 847 over a three-year period.

Dixon-Yates Argued

THE controversial Dixon-Yates case is back in the news. This time it has bobbed up in the U. S. court of claims over the suit filed by the Dixon-Yates interests to recover damages from the government for breach of contract. And it would be a bitter pill indeed for the congressional critics of that contract, who put the pressure on the White House to scuttle it, if Uncle Sam had to pay damages as a contract violator. Dixon-Yates has been such a convenient whipping boy for the critics of the administration's power policies that such an anticlimactic end to their crusade against alleged "influence and corruption" would be something like the heavy villain in a play turning out to be a hero in the last act.

But even if such a dramatic reversal of rôles were to happen, the administration would be in no position to laugh. For it was the administration and not its congressional critics which pulled the plug on the Dixon-Yates contract. And it would be the administration and not its critics which would have to bear the responsibility for any successful claim for damages against the government.

Even while this was going on, Senator Kefauver (Democrat, Tennessee) and others were getting the last bit of mileage out of the Dixon-Yates fiasco with their persistent delay in action to confirm the nomination of Admiral Lewis Strauss to be Secretary of Commerce. They claim they want to know more about the rôle of Strauss as chairman of the Atomic Energy Commission before, during, and after the Dixon-Yates arrangement.

BE that as it may, the government's attorney, Kendall Barnes, had admitted in the U. S. court of claims, that there was no corruption involved in the Dixon-Yates contract. He made this admission in arguments before the court of claims on the long-drawn-out damage suit against the federal government for refusing to go through with its contract to build a power-generating station to supplement the TVA supply to the Atomic Energy Commission in the Memphis, Tennessee, area.

Barnes did contend that the government's chief reason for cancellation of the power contract—the so-called dual rôle of Adolph H. Wenzell, New York investment banker—was legally justified. Barnes said Wenzell acted as adviser to both the Budget Bureau and Dixon-Yates at the same time, resulting in a conflict of interest.

John T. Cahill, attorney for Dixon-Yates, denied that Wenzell ever took part in any of the negotiations leading to the signing of the contract. He called the conflict of interest charge a "flimsy defense" for breaking a contract in which $1.8 million was involved. No decision is expected from the five-member U. S. court of claims before mid-July. But the government's concession that no fraud was involved was viewed as improving the chances of the suit to collect damages for the breached contract.

Columbia River Agreement Reached

THE United States and Canada have reached a mutually satisfactory basis of agreement in principle on the sharing of downstream benefits of the Columbia river development, according to co-chairmen of the International Joint Commission, Douglas McKay and A. L. M. McNaughton. They stated that a first draft of the principles involved would be discussed at a commission meeting in Montreal, April 30th.

Telephone and Telegraph

AT&T Meeting

On April 15th more than 10,000 stockholders of American Telephone and Telegraph Company packed cavernous Kingsbridge Armory for the company's biggest annual meeting. A preliminary count showed the meeting had attracted 10,225 owners of the world's biggest enterprise—drawn by warm, clear weather and the excitement of a 3-for-1 stock split.

Management had asked them to ratify the split—the company's first—and directors voted to increase the dividend 10 per cent if the split is approved. AT&T President Frederick R. Kappel told a press conference before the meeting began the split will cost the company altogether $1,250,000, including the cost of certificates and clerical help.

He also said the record turnout at the annual meeting is costing the company "$100,000 plus." The previous record for an annual meeting was held by Standard Oil Company (New Jersey), which drew 4,200 stockholders last year. Kappel also said the Bell system in 1960 will spend on expansion about the same as the $2.2 billion planned for this year. Asked if he felt there was a pickup in general capital spending, he replied that judging from the inflow of orders for business telephone installations, he would think so.

The split was approved by a margin of better than 100 to 1. Of the total votes cast, 99.1 per cent were in favor of the split. The official count was 59,387,892 shares for, and 542,809 shares against. AT&T stock closed on the New York Stock Exchange April 15th at $250 a share, up 25 cents, after touching a 1959 high of $250.13.

Telephone Service Assistants Frozen in New Bill

The Kennedy-Ervin labor bill, as approved by the Senate Committee on Labor and Education, contained an unexpected provision classifying "service assistants" in the telephone industry as a group barred from the classification of "supervisor." If enacted, this would mean that such telephone company traffic employees could not be classified among telephone company supervisory employees for purposes of exemption from labor organization under the National Labor Relations Act.

Protests against the committee's action were filed by the United States Independent Telephone Association and by Ben S. Gilmer, president of the Southern Bell Telephone and Telegraph Company, on behalf of the Bell system.

Mr. Gilmer pointed out that such a change, as requested by the AFL-CIO Communications Workers of America, would single out a particular group of employees for special classification—the only industrial group so treated. Mr. Gilmer said:

> The matter that concerns me most is that a single union, concerned by the fact that the Labor Board has decided that 198 employees should be excluded from the bargaining unit, is able to secure the insertion in a general law relating to labor reform special legislation limited not only to a single industry, but a particular job title in that industry.

John L. Crull, on behalf of the Communications Workers of America, pointed to the present exemption under the Fair Labor Standards Act of telephone operators' wages at exchanges of fewer than 750 stations, as an even more glaring example of a statutory provision affecting only a single group of employees.

Increased Teleprinter Rates

TWENTY-ONE Bell system telephone companies on April 17th filed notice of new charges with the Federal Communications Commission. They proposed to reduce interstate private line telephone rates and raise teleprinter rates. The new charges, effective May 17th, would bring Bell telephone and teletypewriter service charges in line with those of the American Telephone and Telegraph Company, the parent firm. The Bell system said private line leased telephone rates would be cut about 15 per cent—similar to a decrease which AT&T put into effect last August. Teleprinter charges would be put on a par with increases permitted AT&T last December 1st.

Lease-maintenance Tariffs Withdrawn

As generally expected, the Federal Communications Commission has agreed to the request recently made by the Bell system for the withdrawing of tariffs covering the lease and maintenance of private mobile communications systems for Bell system customers using their own radio frequencies. At the same time the commission made final a previous regulation dealing with safety and special service applications for Bell system lease-maintenance contracts between now and January, 1961.

In this manner the Bell system has removed a controversy with the Justice Department growing out of an interpretation of the consent decree filed in January, 1956, ending the government's antitrust suit to divorce Western Electric from the Bell system. Under the terms of that decree the Bell companies agreed not to engage in nonregulated communication services by contract in competition with other manufacturers or servicers of communication equipment.

The FCC has now approved this solution. In its recent rule making, the FCC provides that no application for lease and maintenance of private mobile communication systems will be granted after January 24, 1961. Until that deadline the commission will grant renewals, transfers, or modifications on applications for lessees prior to the date of the filing of the consent decree (March 9, 1956). There still remains for technical disposition by the FCC a lease-maintenance tariff investigation on petition by Motorola, Inc. Presumably this will be dismissed as a moot proceeding in the near future.

IN a somewhat allied proceeding the Bell system's Pacific subsidiary, Pacific Telephone and Telegraph Company, has

asked the California commission for authority to cancel its interstate lease-maintenance tariff. Such service was found to be common carrier service, subject to regulation and the filing of tariffs by the California supreme court. This decision has since been appealed to the United States Supreme Court by various private equipment and maintenance concerns. Presumably this appeal will likewise be dismissed as moot, if the California commission grants the withdrawal of the lease-maintenance tariffs as requested.

Rate Cases

BALTIMORE city has decided to oppose the recent request for higher rates filed by Chesapeake & Potomac Telephone Company. F. Clifford Hane, deputy city solicitor, reported that study of the utility's petition filed with the state public service commission was under way and an intervener would be filed late in April. The law officer said the city feels the company's present rate base is sufficient for a fair return and it could not understand why the firm needs a new raise when it got one just last year.

The company's petition filed with the commission, a utility regulatory agency, does not flatly come out for a rate increase. It asks that a new valuation be set on the firm's assets and a new fair return be determined. But the petition does state that the telephone company "must seek a re-examination and upward revision of its schedules of rates and charges."

W. Griffin Morrel, vice president, has said the utility does not know what valuation and return will be set and is unable to say what effect they will have on rates. The petition was filed just two days after Wilfred T. McQuaid, people's counsel before the commission, had demanded that the telephone company return some $6 million he said it made in excess of authorized income last year.

Mr. McQuaid contended the utility should refund this sum to its customers because it was based "unlawfully" on a higher rate of return than was allowed by a commission decision in February, 1958. The ruling had granted the company a rate increase.

Mr. Morrel denied the allegation, and a company spokesman has said the new petition has nothing to do with Mr. McQuaid's charges, but involves an entirely new case. The company said increased costs combined with a need for better service have created a necessity for greater earnings.

A WASHINGTON PUBLIC SERVICE COMMISSION hearing on General Telephone Company of the Northwest's petition for a rate increase ended at Spokane on April 9th but was scheduled to resume April 23rd at Olympia. General is asking rate boosts that would bring in an additional $600,000 in revenue annually.

Jacob Taylor, New York financial vice president of General Telephone Corporation, the parent firm, testified that General had gross revenues of $7,160,000 during the year ended last June. He was called as a witness to testify on earnings of utility firms around the country.

Meantime, there were no new developments in the linemen's electrical workers Local 77 (AFL-CIO) strike against General. The union struck March 25th in support of demands for a wage increase. Five hundred unionists struck company installations in eastern Washington, northern Idaho, and western Montana.

Financial News and Comment

By OWEN ELY

Annual Wage Increases Versus Inflation

No one has yet figured out the respective contributions to inflation made by (1) the government with its deficits, (2) the labor unions with their regular wage increases, and (3) subsidies to farmers and other special interests. However, recent opposition to proposed and pending wage increases seems to be taking on the character of almost a crusade. President Eisenhower has indicated his opposition to any increase in steel wages if it would force a rise in steel prices—steel enters into so many different products it comes close to being a universal commodity.

David J. McDonald, president of the steel union, recently resorted to paid advertising with the claim that productivity of his men has increased faster than wage rates.

But a recent government survey shows that while productivity in the steel industry has shown a net gain of 22 per cent over 1947, the figures were down 5 per cent last year and over one per cent in the previous year. Of course union representatives claim that the recent dip was due to the recession, and that 1959 will reverse the trend. But the burden of proof seems to rest on the union considering the fact that the average hourly wage in January of this year was $3.03 compared with $1.33 in 1947.

Production per man-hour of work is, of course, not a perfect yardstick of productivity. It claims for labor the entire benefits from new machinery and other laborsaving devices, the installation of which is generally contributed by the security holders and by management. (Increased skill by labor is probably a relatively small factor.) The benefits of greater productivity should be split among consumers, labor, and stockholders, but unfortunately there is no way of working out the division scientifically. Competition pretty much takes care of the consumer, hence the battle is usually between labor and the stockholders as represented by the management.

In the past fifty years the average hour-

Department Index

ly wage of all manufacturing employees (including overtime) has increased from 19 cents to $2.13, or roughly 11 times. In the same period the cost of living has more than tripled. Adjusting the hourly wage for the cost of living it appears that the wage in terms of purchasing power has increased over 3½ times.

What about the wages of employees of the electric and gas utilities? Figures are available only from 1947. The record, as compared with other segments of the economic system, is as shown in the table below. (See also accompanying chart, page 698.)

THE utilities have prided themselves on their usual ability to get along well with labor, and their relative freedom from strikes and other labor difficulties. In a general way, employees seem to get regular biennial increases in wage rates of substantial amounts with only rare opposition from management. But now that many utilities are being forced to ask for higher rates, it looks as though labor may be encroaching on the consumers' portion of the fruits of productivity.

Perhaps some efforts will now be made to show more resistance to the inevitable union demands, as is now being done by the steel industry, the railroads, etc. If this involves strikes, the management will have to weigh the problems of maintaining service against its duty as umpire to make a fair division of productivity gains between the three groups which it serves or represents.

Why Not More Equity Financing Now?

DESPITE the fact that conditions were temporarily somewhat favorable for bond offerings, and highly favorable for common stock issues, in the first quarter of 1959, total utility financing was considerably below last year's volume, as indicated by the following figures in millions of dollars:

	1959	*1958*	*Decrease*
Electric Companies ...	$534	$851	37%
Gas Companies	214	287	15
Telephone Companies .	96	869	89
Others	27	7	—
Totals	$871	$2,014	57%

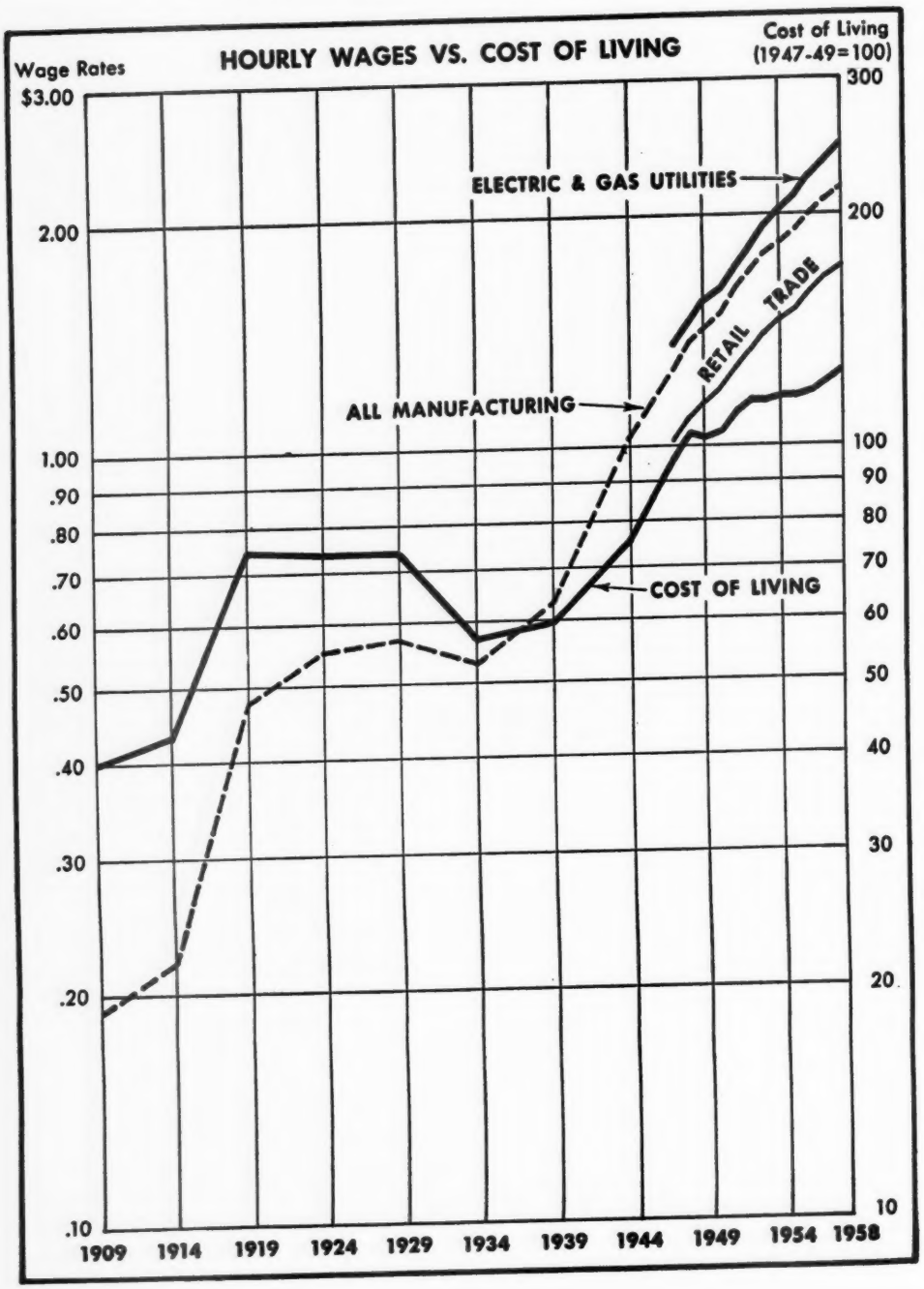
Details of first-quarter financing are shown in the accompanying table on page 700, prepared by Ebasco Services Incorporated.

Recently money conditions have taken a turn for the worse, apparently due to a "squeeze" between the Federal Reserve's anti-inflation policy, and the necessity of providing funds for government deficit financing, plus increased municipal and private borrowing of all kinds. The Reserve does not want to increase the amount of money outstanding any more than necessary (there was a big increase in March) since this is one of the gateways to inflation; but, on the other hand, more money is needed, and the competition for it is raising money rates and depressing the bond market.

The current move has not yet gone to extremes as it did in 1957, but long-term

	Hourly Earnings			*Adjusted Hourly Earnings**		
	1947	*1958*	*% Incr.*	*1947*	*1958*	*% Incr.*
Electric & Gas	$1.35	$2.46	82%	$1.41	$1.98	40%
Wholesale Trade ...	1.27	2.17	71	1.32	1.75	33
Manufacturing	1.24	2.13	72	1.29	1.72	33
Retail Trade	1.01	1.70	68	1.05	1.37	30

*Based on the cost of living dollar (1947-49 = 100%).


HOURLY WAGES VS. COST OF LIVING
Wage Rates
Cost of Living (1947-49=100)
$3.00
2.00
1.00
.90
.80
.70
.60
.50
.40
.30
.20
.10
300
200
100
90
80
70
60
50
40
30
20
10
ELECTRIC & GAS UTILITIES
RETAIL TRADE
ALL MANUFACTURING
COST OF LIVING
1909
1914
1919
1924
1929
1934
1939
1944
1949
1954
1958

government bonds are near their lows and corporates and municipals have been slipping.

SOME recent utility bond offerings have met with a very poor reception and underwriters have probably incurred losses. As shown in the accompanying table, "Current Yield Yardsticks," highest-grade utility bonds on April 15th showed an average yield of 4.33 per cent compared with 3.58 per cent about a year ago, reflecting an increase in the cost of such financing of about 22 per cent. New issues, of course, carry higher rates than outstanding bonds—the Central Louisiana Electric mortgage bonds (rated Baa) were recently offered on a 5.02 per cent basis.

Preferred stocks are making a somewhat better showing than bonds—there has been a comparatively small amount of high-grade preferred stock financing this year.

Why has there been so little equity financing when utility common stock prices are at such high levels? While undue dilution of common share earnings should probably be avoided, nevertheless it would seem that greater advantage might be taken of the present unbalanced markets to issue more common stocks and less bonds.

Electricity from Heat—New Progress Reported

FROM time to time we have commented on the possibility of direct conversion of heat into electricity. (See FORTNIGHTLY, December 4, pp. 968-970.) This should be of special interest in connection with atomic power, assuming that the high temperatures available could be directly used. Thermoelectric power might reduce the problem of radioactive contamination of steam, coolants, and apparatus generally—since the electric current would flow out of the reactor without carrying with it any radioactivity.

Until recently, however, only a moderate degree of heat could be used in the thermocouple—two pieces of unlike metals joined together, where current is generated when heat is applied. Now further progress is reported in several quarters. Most important is the recent report from the AEC Los Alamos Scientific Laboratory. A plastic thermocouple has been developed—a small rod of enriched uranium suspended inside a sealed can of liquid cesium (which, being in a vacuum, partially gasifies) surrounded by a circulating coolant.

The device works as follows, according to *Time*, April 20th: (1) Neutrons generated in the outer part of the reactor penetrate the small container, causing the

CURRENT YIELD YARDSTICKS
(Standard & Poor's Indexes)

	April 15, 1959	*1958-59 Range*		*1957 Range*	
		High	*Low*	*High*	*Low*
Utility Bonds—A1+	4.33%	4.33%	—3.58%	4.38%	—3.70%
—A1	4.36	4.37	—3.61	4.41	—3.73
—A	4.55	4.55	—3.85	4.70	—3.96
—B1+	4.83	4.96	—4.20	5.21	—4.21
Preferred Stocks*	4.52	4.67	—4.26	4.86	—4.42
Utility Common Stocks	3.84	4.98	—3.71	5.44	—4.73

*Twelve industrial and two utility issues (high-grade).

PUBLIC UTILITIES SECURITIES OFFERED FOR SUBSCRIPTION AND/OR SALE
(000 omitted)

	January 1 to March 31, 1959					January 1 to March 31, 1958				
	Total	Electric Companies	Gas Companies	Telephone Companies	Other Companies	Total	Electric Companies	Gas Companies	Telephone Companies	Other Companies
Long-Term Debt										
Offered Publicly	$423,480	$263,000	$110,480	$50,000	-	$ 858,248	$642,000	$115,000	$100,000	$1,248
Offered through Subscription	67,610	59,610	-	-	$ 8,000	718,313	-	-	718,313	-
Offered Privately	92,685	37,150	34,150	6,200	15,185	148,343	38,293	80,650	24,000	5,400
Total	$583,775	$359,760	$144,630	$56,200	$23,185	$1,724,904	$680,293	$195,650	$842,313	$6,648
Preferred Stock										
Offered Publicly	$ 77,250	$ 15,600	$ 33,650	$28,000	-	$ 164,500	$125,500	$ 35,000	$ 4,000	-
Offered through Subscription	-	-	-	-	-	-	-	-	-	-
Offered Privately	8,800	800	3,500	1,000	$ 3,500	7,500	7,500	-	-	-
Total	$ 86,050	$ 16,400	$ 37,150	$29,000	$ 3,500	$ 172,000	$133,000	$ 35,000	$ 4,000	-
Common Stock										
Offered Publicly	$104,877	$ 99,240	$ 1,200	$ 3,605	$ 832	$ 69,186	$ 16,618	$ 31,130	$ 21,438	-
Offered through Subscription	96,209	58,841	30,532	6,836	-	47,893	20,799	25,508	1,586	-
Total	$201,086	$158,081	$ 31,732	$10,441	$ 832	$ 117,079	$ 37,417	$ 56,638	$ 23,024	-
Total Financing	$870,911	$534,241	$213,512	$95,641	$27,517	$2,013,983	$850,710	$287,288	$869,337	$6,648
SEGREGATION OF FINANCING - BY PURPOSE										
Total Refunding	$ 28,290	$ 3,290	$ 25,000	-	-	$ 66,589	$ 4,400	$ 12,189	$ 50,000	-
Total Divestment	$ 832	-	-	-	$ 832	-	-	-	-	-
New Money										
Long-Term Debt	$555,485	$356,470	$119,630	$56,200	$23,185	$1,658,315	$675,893	$183,461	$792,313	$6,648
Preferred Stock	86,050	16,400	37,150	29,000	3,500	172,000	133,000	35,000	4,000	-
Common Stock	200,254	158,081	31,732	10,441	-	117,079	37,417	56,638	23,024	-
Total New Money	$841,789	$530,951	$188,512	$95,641	$26,685	$1,947,394	$846,310	$275,099	$819,337	$6,648
Total Financing	$870,911	$534,241	$213,512	$95,641	$27,517	$2,013,983	$850,710	$287,288	$869,337	$6,648
SEGREGATION OF FINANCING - BY TYPE										
Competitive Bidding	$395,788	$310,788	$ 35,000	$50,000	-	$ 776,118	$616,118	$ 60,000	$100,000	-
Negotiated Sales	$209,819	$ 67,052	$110,330	$31,605	$ 832	$ 315,816	$168,000	$121,130	$ 25,438	$1,248
Subscription										
Competitive Bidding	$ 39,459	$ 11,495	$ 27,964	-	-	-	-	-	-	-
Negotiated Sales	123,338	106,730	2,283	$ 6,325	$ 8,000	$ 47,893	$ 20,799	$ 25,508	$ 1,586	-
No Underwriting	1,022	226	285	511	-	718,313	-	-	718,313	-
Total Subscription	$163,819	$118,451	$ 30,532	$ 6,836	$ 8,000	$ 766,206	$ 20,799	$ 25,508	$719,899	-
Private Sales	$101,485	$ 37,950	$ 37,650	$ 7,200	$18,685	$ 155,843	$ 45,793	$ 80,650	$ 24,000	$5,400
Total Financing	$870,911	$534,241	$213,512	$95,641	$27,517	$2,013,983	$850,710	$287,288	$869,337	$6,648

Ebasco Services Incorporated
Corporate Finance Department
April 14, 1959 - AVR

U 235 therein to fission and give off intense heat. (2) The cesium gas then becomes ionized to a plasma, and a flow of electricity begins from the junction of the uranium and the plasma (now heated to 2,000 degrees C.) to the junction of the cesium and the oil coolant surrounding the can.

The device has produced 40 watts of electricity, enough for a light bulb, for a few hours. While it has not yet been perfected, the efficiency of the elements used is much higher than any combination of solid metals. *Time* magazine speculates that a series of plasma cells in a large reactor could produce power "in major quantities."

ELIMINATION of the investment in a conventional boiler and generator in an atomic plant would considerably reduce plant investment—and high plant cost has been one of the factors preventing atomic reactors from becoming competitive with other plants. Of course, the new device could probably also be used in fuel-burning boilers, though in that case it would eliminate only the generator and not the boiler itself. However, a great deal of work doubtless remains to be done before the new device is fully tested and ready for commercial use in either atomic reactors or conventional plants.

The big private laboratories are also at work on the problem. Dr. George Haller,

CALENDAR OF PROPOSED UTILITY OFFERINGS

Date of Bidding Or Sale	*Approx. Amount (Millions)*	*Bonds*	*Method Of Offering*	*Moody Rating*
5/11/59	$ 6	Southern Nevada Power Bonds	C	Ba
5/12	16	Southwestern Electric Power Bonds	C	—
5/13	15	Idaho Power Bonds	C	Aa
5/19	4	El Paso Electric Bonds	C	Aa
5/20	6	Interstate Power Bonds	C	A
5/25	14	West Penn Power Bonds	C	Aa
5/26	60	Consolidated Edison Bonds	C	Aa
5/28	25	Southern Electric Generating Bonds	C	—
6/2	30	Public Service Electric & Gas Bonds	C	A
6/3	25	Florida Power & Light Bonds	C	Aa
6/16	10	United Gas Improvement Bonds	C	A
6/18	50	Worcester Gas Light Bonds	C	A
6/23	20	Northern Illinois Gas Bonds	C	A
6/25	5	Mississippi Power Bonds	C	A
6/—	15	Pennsylvania Electric Bonds	C	A
6/—	5	Brockton Edison Bonds	C	A
6/—	6	Public Service of New Hampshire Bonds	—	A
		Preferred Stock		
5/5	8	Arkansas Power & Light Preferred Stock	C	—
5/18	4	Interstate Power Preferred Stock	N	—
5/19	2	El Paso Electric Preferred Stock	C	—
6/9	25	Duke Power Preferred Stock	C	—
		Convertible Issues		
5/4	11	Southern Union Gas Convertible 2nd Preferred	*	
5/12	10	Central Illinois Light Convertible Debentures	*	Aa
		Common Stock Subscription Offerings		
5/15	18	Florida Power Corp. Common Stock	N	
5/11	2	El Paso Electric Common Stock		
5/21	41	Consolidated Natural Gas Common Stock		
6/2	25	Virginia Electric & Power Common Stock	C	
		Common Stock Offered to Public		
5/19	15	Gulf States Utilities Common Stock	C	

C—Competitive. N—Negotiated. *Offered through rights.

vice president of General Electric, said in March that "we are getting closer and closer to a major breakthrough" in the field of thermionic conversion. However, GE's devices thus far have been on the small side, designed for use in satellites, etc.

Westinghouse Electric, not to be outdone, announced through Vice President Witting that it hopes by next Christmas to put on the market a $40 portable compact thermoelectric bottle heater and cooler, useful for cooling wine as well as heating the baby's bottle. *Newsweek* in reporting this development said that a score of companies are spending $5-$10 million a year (half the money coming from the Pentagon) to explore the thermoelectric field.

Socialism Reversed in West Germany

IT is interesting to note that, while advocates of public ownership for utilities in this country are still well entrenched and highly vocal, West Germany, which has prospered tremendously in recent years by following our basic philosophy of laissez-faire, is decreasing its socialistic controls.

RECENTLY, Bonn decided to denationalize a wholly state-owned mining concern, Preussische Bergwerks-und Heuteen Akiengsellschaft, by selling 28 per cent of the voting shares to the public. The program was highly successful, with a heavy oversubscription. The 300,000 shares were marketed by a group of fifty banks but were sold only to individuals with an annual income of less than $3,840 a year, and no person could buy more than five shares. The government hoped thus to make more Germans capitalist-minded. In view of the success of the offering it seems likely that some day the Volkswagen shares may be offered, although the cloud on the title has not yet been cleared up.

FINANCIAL DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)			*4/14/59 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earns.*	*% Increase*	*Aver. Incr. In Sh. Earns. 1953-58*	*Price-Earn. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
$297	S	American Elec. Power	52	$1.68	3.2%	$2.33F	5	9%	22.3	72%	33%
57	O	Arizona Pub. Serv.	40	1.20	3.0	*1.88De	4	11	*21.3	64	28
12	O	Arkansas Mo. Power	22	1.00	4.5	1.38De	10	2	15.9	72	32
36	S	Atlantic City Electric	46	1.50	3.3	1.97F	8	10	23.3	76	30
153	S	Baltimore Gas & Elec.	45	1.80	4.0	2.39De	3	8	18.8	75	43
7	O	Bangor Hydro-Elec.	40	2.00	5.0	2.52De	14	5	15.9	80	33
6	O	Black Hills P. & L.	30	1.44	4.8	2.54Ja	20	4	11.8	57	32
109	S	Boston Edison	62	2.80	4.5	3.55De	14	4	17.5	79	43
27	A	Calif. Elec. Power	22	.80	3.6	*1.14De	24	6	*19.3	70	35
23	O	Calif. Oreg. Power	37	1.60	4.3	1.98De	27	3	18.7	81	37
9	O	Calif. Pac. Util.	37	1.60	4.3	2.18Ja**	—	20	16.2	70	31
67	S	Carolina P. & L.	37	1.32	3.6	2.01Ja	7	7	18.4	66	40
32	S	Cent. Hudson G. & E.	20	.80	4.0	1.17De	5	6	17.1	68	36
23	O	Cent. Ill. E. & G.	33	1.44	4.4	2.15F	7	4	15.3	67	43
39	S	Cent. Ill. Light	37	1.40	3.8	2.14F	7	9	17.3	65	36
55	S	Cent. Ill. P. S.	45	1.76	3.9	2.57De	4	16	17.5	68	35
17	O	Cent. Louisiana Elec.	48	1.80	3.8	2.21De	2	8	21.7	81	30
38	O	Cent. Maine Power	26	1.40	5.3	*1.60F	D13	3	*16.3	88	32
147	S	Cent. & South West	68	1.80	2.6	2.54De	5	10	26.8	71	38
12	O	Cent. Vermont P. S.	22	1.00	4.5	*1.38F	25	11	*15.9	72	35

Annual Rev. (Mill.)		(Continued)	4/14/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Increase	Aver. Incr. In Sh. Earns. 1953-58	Price-Earn. Ratio	Div. Payout	Approx. Common Stock Equity
128	S	Cincinnati G. & E.	34	1.50	4.4	1.85De	D8	4	18.4	81	43
7	O	Citizens Util. "B"†	26	1.05	4.0	1.25Se	7	x7	20.8	84	40
119	S	Cleve. Elec. Illum.	52	1.60	3.1	2.60De	D1	6	20.0	62	45
6	O	Colo. Cent. Power	40	1.44	3.3	1.99De	20	6	20.1	66	39
46	S	Columbus & S. O. E.	37	1.60	4.3	2.05F	D20	—	17.6	78	30
405	S	Commonwealth Ed.	61	2.00h	5.3h	3.46F	21	8	17.6	58	43
14	A	Community Pub. Ser.	26	1.00	3.8	1.32De	1	5	19.7	76	46
78	O	Conn. Lt. & Pr.	25	1.10	4.4	*1.43Ja	15	5	*17.5	77	39
582	S	Consol. Edison	63	2.80	4.4	*3.74De	9	5	*16.8	75	38
228	S	Consumers Power	58	2.40	4.1	3.22F	D2	—	18.0	75	39
83	S	Dayton P. & L.	54	2.40	4.4	3.21De	2	4	16.8	75	40
50	S	Delaware P. & L.	63	2.10	3.3	2.89De	5	11	21.8	73	33
246	S	Detroit Edison	45	2.00	4.4	2.21F	D14	3	20.4	90	50
145	A	Duke Power	46	1.40i	3.0	2.39De	10	11	19.2	59	48
99	S	Duquesne Light	26	1.10	4.2	*1.40De	3	5	*18.6	80	34
33	O	East. Util. Assoc.	41	2.20	5.4	2.90F	16	2	14.1	76	34
16	O	El Paso Elec.	32	1.16	3.6	1.58Ja	12	10	20.2	73	37
12	S	Empire Dist. Elec.	25	1.20	4.8	1.61De	8	3	15.5	75	33
57	S	Florida Power Corp.	29	.72	2.5	1.20De	20	18	24.2	60	35
145	S	Florida P. & L.	92	1.64	1.8	3.51De	18	26	26.2	47	35
4	O	Florida Pub. Utilities	24	.72	3.0	1.17De	22	3	20.5	62	31
213	S	General Pub. Util.	53	2.12	4.0	*3.08De	2	7	*17.2	69	40
7	O	Green Mt. Power	21	1.00	4.8	1.41De	30	12	14.9	71	37
70	S	Gulf States Util.	65	1.80	2.8	2.62F	14	7	24.8	69	33
51	A	Hartford Electric	71	3.00	4.2	*4.08De	D6	5	*17.4	74	40
25	O	Hawaiian Elec.	58	2.50	4.3	3.11Ma	D3	6	18.6	80	38
94	S	Houston L. & P.	70	1.60	2.3	2.94F	6	9	23.8	54	44
30	S	Idaho Power	46	1.70	3.7	2.56De	15	10	18.0	66	34
92	S	Illinois Power	41	1.50	3.7	2.14Ja	8	10	19.2	70	37
49	S	Indianapolis P. & L.	39	1.50	3.8	2.20De	5	8	17.7	68	35
31	S	Interstate Power	19	.85	4.5	1.09De	8	4	17.4	78	32
37	S	Iowa Elec. L. & P.	36	1.60	4.4	2.19F	6	x5	16.4	73	40
44	S	Iowa-Ill. G. & E.	40	1.80c	4.5	2.50F	D4	—	16.0	72	43
41	S	Iowa P. & L.	36	1.60	4.4	2.03De	D2	1	17.7	79	34
35	O	Iowa Pub. Ser.	19	.80	4.2	1.20F	6	8	15.8	67	32
15	O	Iowa Southern Util.	30	1.36	4.5	2.02Ja	6	4	19.8	67	40
61	S	Kansas City P. & L.	55	2.20	4.0	3.07F	4	5	17.9	72	38
33	S	Kansas G. & E.	45	1.48	3.3	2.58F	9	9	17.4	57	31
50	S	Kansas P. & L.	32	1.361	4.3	2.10De	2	12	15.2	65	34
43	O	Kentucky Util.	38	1.52	4.0	2.36De	22	8	16.1	64	40
7	O	Lake Superior D. P.	25	1.20	4.8	1.57De	D5	2	15.9	76	41
122	S	Long Island Ltg.	36	1.20	3.3	1.62De**	13	8	22.2	74	36
61	S	Louisville G. & E.	42	1.30	3.1	2.22De	22	7	18.9	59	42
11	O	Madison G. & E.	51	1.80	3.5	3.43De	D17	2	14.9	52	45
5	A	Maine Pub. Ser.	23	1.20	5.2	1.58F	12	7	14.6	76	40
7	O	Michigan G. & E.	66	1.70j*	5.6	4.53De	11	10	14.6	38	37
183	S	Middle South Util.	50	1.90	3.8	2.63F	5	5	19.0	72	39
30	S	Minn. P. & L.	37	1.60	4.3	2.29F	D11	3	16.3	70	33
3	O	Miss. Valley P. S.	30	1.40	4.7	2.20F	3	5	13.6	64	33
15	S	Missouri P. S.	19	.72f	5.8	.89F	D15	3	21.3	81	30
7	O	Missouri Util.	26	1.36	5.2	1.65De	D6	—	15.7	82	30
44	S	Montana Power	74	2.40	3.4	*3.96De	5	10	*18.7	61	39
167	S	New England Elec.	20	1.00	5.0	1.29De**	6	2	15.5	78	36
46	O	New England G. & E.	23	1.10	4.8	1.65F**	10	7	13.9	67	41
98	S	N. Y. State E. & G.	56	2.30	4.1	*4.02Ja	30	11	*13.9	57	35
264	S	Niagara Mohawk Pr.	40	1.80	4.5	*2.12De	11	—	*18.7	85	28
92	O	Northern Ind. P. S.	49	2.00	4.1	2.77De	D10	3	17.7	72	36
155	S	Nor. Sts. Power	25	1.10	4.4	1.29De	3	3	19.4	85	33
11	O	Northwestern P. S.	21	1.00	4.8	1.37De	D2	2	15.3	73	32
138	S	Ohio Edison	64	2.64	4.1	3.65F	1	3	17.5	72	40
54	S	Oklahoma G. & E.	33	1.00	3.0	1.47F	13	10	22.4	68	31
26	O	Orange & Rockland Utils.	25	.90	3.6	*1.29De**	3	22	*19.4	70	27
17	O	Otter Tail Power	34	1.60	4.7	2.23F	1	1	15.2	72	30
535	S	Pacific G. & E.	65	2.60	4.0	3.74De	10	7	17.4	70	34
52	O	Pacific P. & L.	39	1.60	4.1	*2.40De	17	9	*16.3	67	30

Annual Rev. (Mill.)		(Continued)	4/14/59 Price About	Dividend Rate	Approx. Yield	Recent Share Earns.	% Increase	Aver. Incr. In Sh. Earns. 1953-58	Price-Earn. Ratio	Div. Payout	Approx. Common Stock Equity
131	S	Penn Power & Lt.	59	2.50	4.2	3.12F	D2	2	18.9	80	34
248	S	Phila. Elec.	55	2.24	4.1	*2.76De	6	4	*20.0	81	38
36	O	Portland Gen. Elec.	29	1.20	4.1	1.80De	3	8	16.1	67	37
72	S	Potomac Elec. Pr.	29	1.20	4.1	*1.57De	—	7	*18.5	76	30
97	S	Pub. Serv. of Colo.	53	1.90k	3.6	2.66De	D5	5	20.0	71	33
344	S	Pub. Serv. E. & G.	42	1.80	4.3	2.14De	D6	4	19.6	84	35
81	S	Pub. Serv. of Ind.	46	2.10	4.5	2.88F	5	5	15.9	73	33
32	O	Pub. Serv. of N. H.	20	1.00	5.0	1.30Ma	1	7	15.4	77	36
15	O	Pub. Serv. of N. M.	30	.80g	2.7	1.39De	15	11	21.6	58	34
27	S	Puget Sound P. & L.	35	1.44	4.1	*1.97De	8	12	*17.8	73	50
65	S	Rochester G. & E.	43	1.80	4.2	2.58De	14	3	16.7	70	37
8	S	St. Joseph L. & P.	34	1.50	4.4	1.91De	D7	2	17.8	79	32
59	S	San Diego G. & E.	28	1.04	3.7	1.40Ja	1	3	20.0	74	35
11	O	Savannah E. & P.	28	1.00	3.6	1.41F	—	5	20.0	71	33
11	O	Sierra Pacific Pr.	35	1.40	4.0	1.98F	2	10	17.7	71	31
256	S	So. Calif. Edison	61	2.60	4.3	3.70De	22	9	16.5	70	36
50	S	So. Carolina E. & G.	36	1.30	3.6	1.88F	11	13	19.1	69	33
7	O	Southern Colo. Pr.	20	.90	4.5	1.47De	11	4	13.6	61	36
272	S	Southern Co.	38	1.30	3.4	1.81De	10	9	21.0	72	34
20	S	So. Indiana G. & E.	35	1.60	4.6	2.46F	4	3	14.2	65	35
8	O	So. Nevada Power	28	1.00	3.6	1.64Ja	7	7	17.1	61	46
3	O	Southwestern E. S.	17	.64	3.8	.99F	8	x6	17.2	65	27
44	S	Southwestern P. S.	42	1.48	3.5	1.82F	1	4	23.1	81	36
32	A	Tampa Elec.	52	1.20	2.3	1.78Ja	7	10	29.2	67	33
155	S	Texas Utils.	69	1.76	2.6	2.78F	11	12	24.8	63	40
42	S	Toledo Edison	17	.70	4.1	1.12De	11	4	14.3	63	31
17	O	Tucson G. E. L. & P.	30	.76	2.5	1.12De**	—	12	26.8	68	47
132	S	Union Elec. of Mo.	35	1.52	4.3	*1.77De	5	6	*19.8	86	32
36	O	United Illum.	29	1.38	4.7	1.64De	3	3	17.7	84	50
6	O	Upper Peninsula Pr.	32	1.60	5.0	1.83De	4	2	17.5	87	32
45	S	Utah Power & Light	35	1.20	3.4	1.79F	D1	7	19.6	67	44
140	S	Virginia E. & P.	37	1.10	3.0	1.66De	8	17	22.3	66	39
31	S	Wash. Water Pr.	46	2.00	4.3	*2.49F	1	6	*18.5	80	32
142	S	West Penn Elec.	38	1.60	4.2	2.27F	3	6	16.7	70	32
77	O	West Penn Power	60	2.40	4.0	3.27Se	D1	6	18.3	73	37
12	O	Western Lt. & Tel.	41	2.00	4.9	2.82De	2	2	14.5	71	41
28	O	Western Mass. Cos.	26	1.20	4.6	1.67De	4	13	15.6	72	50
119	S	Wisc. Elec. Pr. (Cons.)	39	1.60	4.1	2.12De	D12	1	18.4	75	40
44	O	Wisconsin P. & L.	33	1.36	4.1	2.03De	2	4	16.3	67	37
43	S	Wisconsin P. S.	26	1.20	4.6	1.77De	5	3	14.7	68	37
		Averages			4.1%		6%	7%	18.3	72%	
		Foreign Companies									
215	S	Amer. & Foreign Power	17	$1.00	5.9%	$1.98Se	x14%	0	8.6	51%	44%
170	A	Brazilian Traction	7	.25	3.6	1.52D'57	D30	0	4.6	16	75
83	A	British Col. Pr.	39	1.40	3.6	1.95De		7%	20.0	72	28
20	O	Calgary Power	98	2.00	2.0	4.55N	x16	24	21.5	44	27
19	A	Gatineau Power	43	1.50	3.5	2.55De	7	9	16.9	59	35
42	O	Mexican L. & P.	15	1.00b	6.7	1.96D'57	x17	24	7.6	51	46
15	A	Quebec Power	39	1.60	4.1	2.34De	8	10	16.9	68	53
71	A	Shawinigan Water & Pr.	35	.68	1.9	1.60De	5	23	21.9	43	38

*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher. **On average shares. †Stock dividends (only) are paid on the "A" shares. x—Average increase in share earnings 1952-57. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. b—Also 5 per cent stock dividend May 1, 1958. c—Also 5 per cent stock dividend June 10, 1958. f—Also stock dividend of one-half per cent quarterly. g—Also 5 per cent stock dividend July 1, 1958. h—Also 2 per cent stock dividend November 20, 1958, included in the yield. i—Also 15 per cent stock dividend January 29, 1959. j—Also 3 per cent stock dividend (paid each year end) included in yield. k—Also 5 per cent stock dividend payable February 20, 1959. l—Includes 6 per cent extra.

What Others Think

The EEI Convention

THE importance of the nation's investor-owned electric industry to our economic welfare and to our continued growth in the years ahead was substantiated with cogent facts and figures by J. E. Corette, retiring president of the Edison Electric Institute, at the organization's twenty-seventh annual convention in New Orleans, Louisiana. He said our nation's resources for defense and our national productivity depend upon an abundant and never-failing supply of electric energy. Since government ownership of utilities has always been the first goal of the Socialists and Communists, Corette declared, "the future of the American system of government is dependent on the electric business continuing in the hands of investor-owned, tax-paying companies." He gave a few statistics that demonstrated how well the electric utilities weathered the 1958 recession.

Generation of electricity increased 2 per cent in 1958. Profits of investor-owned utilities showed a healthy increase of 7.5 per cent, while those of all private corporations decreased 18 per cent. Construction expenditures for investor-owned utilities increased 2.3 per cent over those of 1957 and the $3.8 billion spent by the industry in 1958 was $100 million more than 1957 expenditures, an all-time high. In addition, generating capacity sharply increased in 1958.

Corette made some predictions for the future predicated on assumptions that there will be no major war and that the free enterprise system will continue as we know it today. He said:

> . . . Generating capability is expected to nearly double by increasing from 149 million kilowatts to 290 million kilowatts. . . . Generation should more than double by increasing from 0.64 trillion kilowatt-hours to 1.3 trillion kilowatt-hours. Customers will probably increase 25 per cent, from 56.2 million to 70 million customers. . . .
>
> Revenues should increase from $8.5 billion in 1958 to about $20 billion in 1968, representing a 135 per cent increase over 1958 levels.

IN an effort to dispel some of the misinformation circulated about the superiority of Russia to the United States in the development of electricity, Corette related some interesting facts. He said that in 1957, the U. S. per capita production of electricity was 4,166 kilowatt-hours which is about four times that of Russia. And in terms of generating capacity increase between 1957 and 1965, he said the United

States will have increased its superiority over Russia from 98 million kilowatts to 142 million kilowatts. Corette stated:

> In view of these facts, it is evident that, in respect to electric power, the United States is not only holding its own but is increasing its superiority over Russia and will continue its world leadership in electric power supply.

Corette pointed to the growth of "political elephantiasis" on the part of government in America and said that a recent Budget Bureau report found that there were about 20,000 federal commercial business enterprises. He said the trend toward government operation of business was continuing and called attention to the fact that "There is no better example of the growth and development of the government in business than the history of government-owned or -financed generating capacity which has increased as follows: 1932—7 per cent of total; 1940—14 per cent of total; 1950—20 per cent of total; 1957—25 per cent of total."

He criticized the preference clause as one of the cardinal reasons for this amazing growth, saying it "is an encouragement to the creation and development of government-owned, government-financed, and tax-subsidized power systems." Corette said REA co-ops were created to supply power to rural areas where service was not available from investor-owned companies and were subsidized with 2 per cent federal money for construction costs. But today, he said,

> . . . Over 97 per cent of the farms in America are now being supplied with electricity and the REA's have expanded into the suburban, commercial, and industrial business and into the generation and transmission business . . . Now three out of every four new REA customers are nonfarm. Nationwide, the REA has completed its original job, has abandoned the concept of its creation, and has become probably the most serious competitor of investor-owned utilities.

In relation to revenues, the retiring president said, investor-owned electric companies pay approximately 23 per cent of their total revenues in taxes. Government-owned or -financed projects, however, pay only 2.4 per cent of their revenues in taxes.

This tax disadvantage is now aggravated by the recent ruling of the Internal Revenue Service in disallowing certain kinds of advertising as a business expense. Corette stated:

> For our industry not to be allowed to deduct as an operating expense for tax purposes and rate purposes, advertising costs when the ads relate to our competition with government power, would be a serious blow, not only to our business but to all free advertising and free speech in America. . . .
>
> The industry is fighting and will continue to fight both before the Federal Power Commission and the Internal Revenue Service to protect what it believes to be its right to carry on this type of aggressive and competitive advertising and to deduct the expense for both rate and tax purposes.

In order to stop the public power trends of the past twenty-five years, Corette outlined a 7-point program of action. They included: (1) continue excellent service; (2) employ capable people; (3) expand public information programs; (4) conduct economic education programs; (5) encourage individual political activity; (6) interest others in politics; (7) oppose government ownership.

Are Women Important in Your Life?

MRS. MARY G. ROEBLING, chairman of the board and president of the Trenton Trust Company, Trenton, New Jersey, gave the EEI convention delegates the woman's viewpoint in a very interesting talk at New Orleans. She pointed out that women own more stock in the electric light and power industry than men do and also that in recent elections it was indicated that more women than men vote. In view of these facts and others, she thought it might be a good time for the industry to start cultivating women in ways other than to sell them merchandise. One fact she learned by some research was that about 30 per cent of women approve of the Tennessee Valley Authority. However, only 60 per cent of those she interviewed had ever heard of it, which indicated that apparently no one had attempted to explain just what TVA was.

Mrs. Roebling said the utilities have a job to do in influencing women leaders in communities. She made the following points as proof that women are important in the life of the electric utility industry:

1. They are your customers.
2. They use the appliances that boost the meter readings.
3. They own securities in your business and are increasingly in evidence in your stockholders' meetings.
4. They are voters who can affect the issues that come before the city, state, and nation.
5. They are many women in public office including the Congress before whom comes this special problem of TVA expansion.
6. They are the mothers of the generation which will suffer if the enemies of free enterprise prevail. So there is no question but that the women of America are important in your continuation as an exponent of that system.

THERE are three aspects that should be gotten into from the woman's viewpoint by electric utilities, Mrs. Roebling asserted. The first is *public relations and woman power*. The second is *tax fairness and how to interest women in it*. And third, *the necessity for big business getting into politics*.

She said that it was time the public utilities stopped thinking about women as merely cooks and tried to explain some of the merits of private industry as opposed to government ownership, such as TVA. She said she felt that possibly the educational job in connection with the issue of government power *versus* private power had not been done as well as it might, and she suggested that the woman in the home be made more of a target with the end view of allying her and and her views to the side of private enterprise. Mrs. Roebling stated:

> It is not impossible to reach the women and to make them your strongest allies. It has been demonstrated within the lifetime of everybody in this room that you can get us to send our sons and daughters to war to preserve freedom. Why then don't you do something about showing us how to preserve freedom when it is threatened right here and now through economic means?
>
> I believe that an organization made up of the wives of executives and leaders in the private power business should form a movement to clarify the problems before this convention—women who by their very close association with the business could be augmented by the women leaders of the nation in business and finance. A chosen group, who could come to Washington each year as the

guests of this association, and meet before the regular meeting.

Mrs. Roebling said that as soon as the women of the nation are selected as to their willingness and capacity to be of service in such an organization, an educational campaign should be put into effect.

IN regard to *tax fairness and the woman,* Mrs. Roebling said that in most households in the United States the budget is balanced by the woman. However, she is not familiar with the economic aspects of high financing and the devious methods used by the federal government and the commercial banking system.

In conclusion, Mrs. Roebling warned that if the government ever controls the total power output of the country, it will exercise control over the greatest labor-saving, health-giving, entertainment power in all the world. She said she does not believe that women are not interested in who owns the electric light and power companies in their towns. She said she thinks it might be well if many of these companies had an officer or department in charge of politics, preferably a woman.

The Impact of Inflation

THE problems and the opportunities of the electrical industry were outlined by Mark W. Cresap, Jr., president of the Westinghouse Electric Corporation. He pointed to our national growth, the increases in production, and the ever-expanding capacity to generate power as sure signs of a healthy and expanding industry.

The greatest problem of the future, according to Mr. Cresap, is not technological advancement and development but inflation. It is necessary, however, that the electrical industry continue to support research projects that make the industry's technological advances a reality. On the subject of inflation he said:

> The cure for the inflation in our economy may be complex, but the cause of it is quite clear. We have been distributing the fruits of our production faster than we have been earning them. We have been raising wages faster than we have been raising productive efficiency. Employers have simply had to pay their higher costs, if they can, out of higher prices. There is not much else they can do in that situation—not if they want to stay in business.

The electrical industry has been struggling to maintain prices at a minimum while labor costs, since 1939, have tripled. Mr. Cresap believes that this trend has forced our economy into a "very delicately balanced point." We could continue in the wage-price spiral which has advanced steadily since the end of World War II or industry can hold the line on wages and prices and check the existing inflation. In order to stop the spiral, industry will be forced to limit annual wage increases and bring them in line with the increases in productivity.

THERE is the very real possibility that labor may be pricing itself out of work. High labor rates already have closed large segments of our export market. The recent awarding of a TVA generator contract to a British firm was noted as an indication of our dwindling export market. Inflated labor costs were blamed for the inability of U. S. companies to submit bids which could compare with those offered by British competitors. Mr. Cresap asserted that high living standards are not a result of high wages but of increased production. The cycle, therefore, would be: improved and greater production resulting

in lower prices—lower prices would increase consumption—the additional sales would result in increased employment.

Calling on all the electrical industry to fight inflation trends, Mr. Cresap said:

> Speaking as a representative of the electrical industry, I suggest that we tackle the problem by dealing forcefully with the two basic factors of the inflationary equation: acceleration of the upward trend of productivity, and continued resistance to wage increases exceeding the rise in productivity.

Mr. Cresap expressed confidence in the industry to overcome the problem of inflation and he noted the rich talent available and the co-operation already established in the industry as the guaranties of ever-greater opportunities and advancements in the years ahead.

"Climate Control"

THE EEI convention was told by C. M. Wallace, Jr., vice president of Georgia Power Company, that "climate control" offered the electric power industry the greatest load-building opportunity in its history. He explained that "climate control" advances, which include air conditioning, the heat pump, electric space heating, and other humidifying and filtering devices, might well become the means to effect a profitable base load. He pointed out that air conditioning had caused the problem of a high summer peak for many electric utilities, with a decreasing annual load factor. He said that "unless we do something to balance this load and achieve full 'climate control' we can in a very short time find ourselves in trouble."

Speaking of what could happen to the rate of return in a typical company if its load factor were improved by 10 per cent, he showed that such a situation could increase the return on investment anywhere between 5 per cent and 6 per cent. Wallace also pointed out that

> The goal of a good rate structure is one that will produce healthy earnings under varying market conditions now and in the future. The design of rates should put predominant emphasis on future markets and other future conditions.
>
> Rates that encourage load factor improvement would generally meet these tests, if the promotional feature becomes effective at the load factor where the revenue from the rate structure is already adequately compensatory and the lower or promotional price bears a proper relationship to full incremental generation and other costs, including fair earnings. . . .

HE said a rate structure pattern which accomplishes these objectives is for the long-term best interest of the company and of all its customers. Load factor is truly, along with the proper pricing pattern, the major key to improving and stabilizing earnings. In speaking of what "climate control" can achieve as a load-building device under proper guidance, he said, it is proper to ask just what is the potential.

The Georgia Power vice president stated that most air-conditioning units fail to control humidity during the moderate and cooler hours when, although it is humid, cooling is considered unnecessary. And he said not many heat pumps on the market today can adequately control humidity at night within reasonable limits. To adequately deal with this situation, Wallace asserted, a machine or device capable of running at a reduced capacity at night is needed, with the added feature of reheating the air to room temperature if necessary.

Wallace showed the benefits that a utility can expect to gain from a "climate controlled" residence. An all-electric residence with a heat pump totaled 15,000 kilowatt-hours per year, with a total cost of $244.50 annual revenue. The same residence with humidity control jumped to 18,000 kilowatt-hours per year or $293.40 annual revenue. Then he gave an example of an all-electric home with air conditioning and resistance heating which consumed 20,000 kilowatt-hours per year for a total revenue of $326. This same home with humidity control utilized 23,000 kilowatt-hours per year for total annual revenue of $374.90.

"We can expect even tougher competition in the future," Wallace told the convention delegates. He pointed out that the gas industry is giving the electric power people more and more competition. He said that it would be necessary to vigorously sell air conditioning and electric heating, or, in short, "climate control," with its many advantages, on a far more aggressive basis than has been done in the past. He urged the various utility executives to embark on dynamic development of the cooling and heating market, or, in short, the "climate control" market, if they wish to really achieve the utmost in their load-building programs.

AEC Chairman Notes Atom Plant Progress

JOHN A. MCCONE, chairman of the Atomic Energy Commission, exhorted the EEI delegates to put their shoulders to the wheel and make progress toward the goal of competitive nuclear power as rapidly as possible. He said he was encouraged by the outlook of the nation's atomic power program. He stated that in his opinion the United States should lead the world in nuclear technology, because we know more about this difficult science than do men of other nations. He said that in spite of the fact that one or possibly two other nations are producing more kilowatts from the atom than we are, the United States is not actually behind in atomic science.

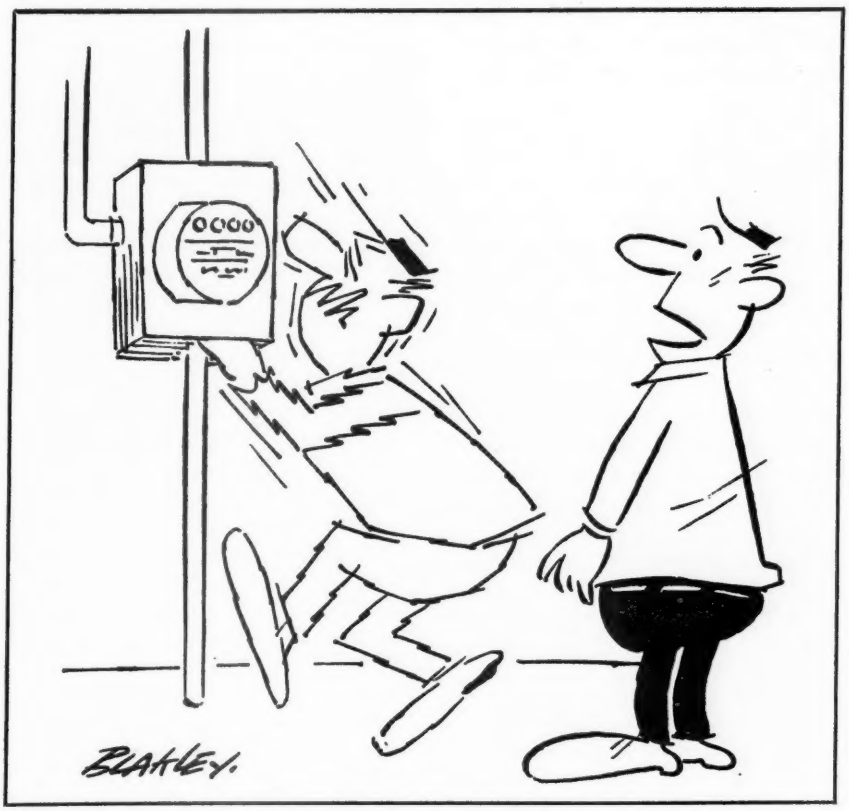
He said:

> . . . Kilowatts at high cost are not important to us. We have the lowest-cost power of any principal nation in the world. Moreover, we have abundant supplies of conventional fuel. What is important then is to advance "know-how"—to be there first with the cheapest and most dependable atomic power. This calls for steady, rapid development. It does not call for large quantities of kilowatts.

McCone said that what is economic for other countries to do because of high cost of fossil fuels does not make good sense for us in the United States. "Basically, we must create atomic power according to our needs and from plants which will produce this power competitively. This accomplished, nuclear power will take its place naturally in meeting the needs of your customers.

THE AEC chairman declared that he considers economically competitive nuclear power to be entirely possible. He is convinced that it will be competitive at an earlier date than many of us think. But it is urgent for us to overcome the technical problems as soon as possible and the government, in the national interest, must see that it is done. He admitted, of course, that the electrical industry, both public and private, should also work with unrelenting effort towards the perfection of atomic power processes.

Pointing out that there is now broad agreement on the basic objectives of the



"SORRY, I MISSED THE SAFETY CLASS THAT COVERS THIS PARTICULAR THING"

nation's atomic power program, he outlined what they were:

1. To reduce the cost of nuclear power to competitive levels in high energy cost areas of this country within ten years.

2. To assist friendly nations now having high energy cost to achieve competitive levels in about five years.

3. To support a continuing long-range program to further reduce the cost of nuclear power.

4. To maintain the United States position of leadership in the technology of nuclear power for civilian use.

5. To develop breeder-type reactors to make full use of the nuclear energy latent in both uranium and thorium.

McCone then took a look at the present atomic situation and stated that seven experimental power reactor plants are now in operation. He said they have performed well, have contributed valuable firsthand operating information, and have given better results than scientists and engineers expected. He said 16 plants incorporating eight different reactor concepts have been authorized for construction by the government or industry. Upon

completion, although most of the plants are relatively small, their total kilowatt capacity will amount to one million kilowatts.

One of the plants now being built, the Commonwealth Edison Company's Dresden plant, will be completed this year. The Yankee plant being built by the Yankee Atomic Electric Company will be completed in 1960, and will be followed in 1961 by Consolidated Edison Company's giant 255-megawatt pressurized plant at Indian Point. In addition, Pacific Gas and Electric Company's Humboldt Bay plant with nuclear superheat and its Elk River plant are both under construction and should be completed in two years or more.

McCone said that although there have been a number of disappointments in the atomic energy program, both the AEC and industry know more about the nuclear power business than they knew in the past. He said:

> . . . Estimates can now be checked with actual cost experienced in a dozen locations. Government procedures, difficult under the new laws and regulations of 1954, are now understood by all parties concerned. Finally, we have an agreed set of objectives to guide us. We can now move along much faster.

THE AEC chairman said that a new area of great importance in atomic energy is the gas-cooled reactor. He said more recently there is evidence that gas-cooled reactors can operate at considerably higher temperatures which improve their relative economics. Congress has been asked to authorize the building of a highly flexible graphite-moderated, helium-cooled reactor which will be built on a commission site for experimentation and power production. In addition he said he has asked Congress to authorize the building of the high-temperature gas-cooled reactor proposed by the Philadelphia Electric Company and the General Dynamics Corporation. While the plant will be privately financed, he said, by a group of 52 power companies, the AEC will also contribute $14.5 million for research and development.

McCone said that the problem immediately at hand is to produce competitive atomic power as soon as possible. In his opinion small experimental reactors have not been found to be the ideal answer for trying out new atomic power concepts, inasmuch as they have a habit of posing a great many more questions than they answer. He said each reactor concept has to go through an evolution of development and that there are no easy short cuts. It is for this reason, McCone stated, that the AEC believes that prototypes are the best method because they are the smallest plants which can be built and still prove particular technical advances on a scale which permits practicable conversion later to large-size plants.

On Nuclear Power

SUBSTANTIAL progress has been made during the past year towards the development of economical nuclear power by the independent electric utility companies, reported Elmer L. Lindseth, president of The Cleveland Electric Illuminating Company and chairman of the EEI Committee on Atomic Power, at the recent EEI convention. Of the investor-owned utility nuclear program he said:

> Today, three nuclear power projects in which electric utilities are participants are in operation; ten utility-sponsored projects are under construction or in various design stages; and two additional projects are in the planning stage. Utility company expenditures on these 15 projects will amount to more

than $540 million, exclusive of excess operation and maintenance costs over equivalent costs of conventional power. . . .

A large number of utilities are also participating in 11 other nuclear research, development, and study projects, involving substantial expenditures. . . . As of year-end 1958, total utility company expenditures in these and the previously mentioned projects amounted to $130 million with 131 utilities participating.

LINDSETH told EEI members that the Atomic Energy Commission, working with the Joint Committee on Atomic Energy, had done much to establish a national nuclear energy program with long-range objectives. The AEC, he said, had announced its intention to exercise greater leadership and control over all phases of the program and to a degree had taken away much of the initiative for developing new nuclear reactors from the electric industry. Electric utilities, however, were encouraged to build promising prototype reactors by offer of AEC subsidies. This phase of the program would work like this, Lindseth said:

> . . . the AEC would determine desirable reactor types, sizes, designs, and schedules for construction to meet their program objectives. The AEC would specify to industry the desirable prototype reactor projects which would qualify for government assistance. Financial assistance would be offered to cover capital costs in excess of conventional plant costs, if such authority were approved by Congress. However, such financial assistance was not to exceed 50 per cent of the nuclear plant costs . . . nor to reduce the capital cost to industry below the equivalent cost of a conventional plant.

THE Edison Electric Institute endorsed the major objectives of the long-range national nuclear power program, Lindseth related, but recommended an additional objective which was to bring the development of atomic power within the framework of commercial development as soon as possible. He said that in regard to the rôle of government in technical aspects of nuclear power development, during the transition period to competitive nuclear power, the AEC should have an important part to play. But the electric industry advocated that this rôle of AEC should be a transitional one only and with such responsibility transferred to industry as soon as practicable. Also reactor development and experimentation should be AEC's sphere of activity and it should not own reactors or utility systems, public or private. Lindseth stated:

> . . . Projects proposed by the AEC involving either prototype or subsequent reactors should be submitted to industry to be constructed, owned, and operated by industry, with sufficient government financial assistance provided to bring this about. . . .
>
> To date, electric power companies have invested in nuclear power projects amounts substantially in excess of the equivalent costs of conventional plants for both AEC proposed and unsolicited proposals, thus reducing the required expenditure of government funds.

As to what can be expected in the year ahead in nuclear power development, Lindseth stated that the AEC has submitted to the Joint Committee on Atomic Energy a bill authorizing a program which calls for the construction by the government of four small-scale reactors, two of which may be built by either privately or publicly owned companies, if not built by the commission. Moreover, legislation has been

drafted to give research and development assistance to the Philadelphia Electric-sponsored gas-cooled reactor project and to construct the government-owned and -operated gas-cooled reactor based on a design study authorized by Congress and completed last year by Kaiser Engineers.

Lindseth concluded his remarks by pointing out that although some tangible and worth-while gains had been made in connection with the development of atomic power in the past year, the government still does not seem to fully recognize that cost-cutting incentives and initiative of industry, as well as ownership of facilities, are imperative in order to attain the objectives sought at minimum cost.

He said these basic fundamentals have become obscured because of the birth and early development of nuclear power in a cloud of secrecy and government monopoly. "There is nothing special about nuclear power that requires its future development outside the framework of our free enterprise type of business system, notwithstanding the claims of advocates of public power and government monopoly who would have America believe this."

Balancing the Boiler Orders

LEWIS R. GATY, vice president of the Philadelphia Electric Company, in his speech to the convention, called for additional research and progressive thinking in order to meet the expected demand for 15 million kilowatts of turbogenerator capacity that will be expected in the next four or five years.

Advanced ordering and storing of boilers would help to alleviate the pressure on manufacturers. Cost of storing such advance-ordered equipment would be absorbed by the savings achieved through avoiding the normal annual price increases on equipment.

Mr. Gaty forecast that multimillion-kilowatt capacity generating stations will become common when it is realized that the expanding of present generating sites offers less problems than attempting to find new areas where stations can be constructed. "Peak shaving" through the use of decentralized gas and diesel-driven generators will come into more general use as soon as the economic advantages of this system are realized. Such unattended gas or diesel installations, located on the transmission systems, would feed power directly into selected areas to cover peak demands.

Looking into the future, he emphasized that in order to meet the industry's obligations to supply more power the field of research must be expanded. It is Mr. Gaty's contention that the rewards achieved from basic research are many times greater than the effort and financial expense involved. The key to a dynamic industry is "the most effective use of science and technology for the problems ahead."

Mr. Quig on Price Structures

THE economic status of the electrical industry, the increase in production costs, and rate-making policies were explored by Robert S. Quig, manager of the rate department of Ebasco Services Incorporated. In his speech, entitled "Pricing Policies for Tomorrow," Mr. Quig drew the following six conclusions regarding costs and rate making: (1) Investments in the industry are increasing. Increased capital costs, including depreciation, insurance, and taxes, make it evident that higher charges and more simplified methods of rate making are needed. (2) A re-examination of front-end charges of the rate structure, including initial charges and minimums, is needed. Coupled with this re-examination there should be an

evaluation of pricing policies to determine how far kilowatt and customer charges should be spread over the energy charges. (3) The economies obtained through the use of large and efficient generating units will have to be protected with added provisions for fuel price adjustments. (4) If maximum customer utilization is to be achieved, increased sales promotion will be called for. (5) Annual operating costs in the all-electric home will demand a higher degree of customer education. (6) Research on load utilization and analyses of operations must be investigated by small companies as well as by the larger corporations.

Mr. Quig believes that the majority of these changes will be in the nature of "evolutionary" changes and many of them will be on an experimental basis. He said:

> It has been aptly stated that the private utility industry is exposed to all of the economic forces that affect other businesses, and, in addition, the utility business has the added risk of the complexities and political implications of regulation.

In an effort to improve regulatory relations Mr. Quig stated that the regulators should be informed as to the investment and policy problems of the industries and companies involved. He also emphasized that money spent on a continuing inflationary price level does not inject fair value into rate bases for all the dollars that have previously been committed at lower price levels. A large portion of prior investments has been "plowed under" when it comes to producing real earnings. This "plowing under" occurs in the original cost depreciated rate regulation process.

Some regulatory commissions have recognized the utilities' difficulties in the face of inflation and they have assumed what Mr. Quig calls a "forward rate base approach." Such commissions have looked beyond the test year and have recognized the fair value determinations which present conditions warrant. Mr. Quig quoted the Iowa supreme court in the Fort Dodge rate case, saying that the court had stated that "The arguments against fair value are all ones of expediency, not ones of justice or fundamental fair treatment."

The first electric utility to recognize fair value depreciation was the Iowa-Illinois Gas & Electric Company. Following a ruling by the Iowa supreme court the utility began booking fair value depreciation in 1958. This, Mr. Quig asserts, is both economically sound for rate making and accounting. Mr. Quig stated:

> Much progress has been made in many companies. Much more remains to be done if the electric utilities are to handle prudently and price adequately the tremendous service demands of customers, and at the same time make a fair profit for investors.

In closing, Mr. Quig urged a frank constructive appraisal of organization setups for the demanding job that lies ahead of the industry.

Significant Ratios in the Electric Power Industry

For many years Professor Franklin H. Cook of the faculty of Pennsylvania State University has been studying in great statistical detail various economic phenomena in connection with electric utility company operations. Using data assembled from various companies, he has compiled some painstaking and persuasive findings of comparisons in such diverse categories as plant, finance, operating

costs, revenues, and characteristics of consumption. He has not only broken this down from general average to minimum, maximum, and medium performances, but he has made separate conclusions with respect to steam companies, hydroelectric companies, and those electric distributing companies which only purchase their supply.

Readers of PUBLIC UTILITIES FORTNIGHTLY may recall several interesting and scholarly comparisons written by Dr. Franklin H. Cook and published in this magazine in recent years. The most recent of these was entitled "Capital Needs of Electric Power," published in the issue of December 4, 1958.

Now Dr. Cook has apparently obtained preliminary sponsorship for a more systematic and periodic method for making his findings useful and available to those immediately concerned. This is the Bureau of Business Research of the College of Business Administration of the Pennsylvania State University, of which Dr. Earl P. Strong is director. It has now published the first of a series of five bulletins in which Dr. Cook's materials are presented.

THE first of these to make its appearance was "Significant Ratios in the Electric Power Industry." Each of these bulletins, designed to sell for $25, will be kept up to date by an annual supplement. But there is included a rather intriguing and original method for code comparison. When a volume is purchased by an electric power company included in the study, it is supplied with a code number so that it may thereafter compare its position with the number for its type and size of company. So far, distribution has been limited to companies included in the study but there are additional copies still available from the original limited printing.

This first bulletin, "Significant Ratios in the Electric Power Industry," contains not only textual material but—of even greater statistical value—a number of tables and charts of ratios and percentages constructed upon medians of the privately owned electric power companies in the United States. All of these companies secure their operating revenue solely from the sale of electric energy; they are classified according to type, then a further subdivision is made on the basis of size. The appendix, extending from 1939 to 1956, contains the ratios and percentages for individual companies within the group.

"SIGNIFICANT RATIOS IN THE ELECTRIC POWER INDUSTRY," as already stated, is the first of a series of five bulletins projected by Dr. Cook. The second, "A Financial Ratio Analysis of Electric Power Companies," examines the capital structure of the nine different types and sizes of companies, the adequacy of that structure, the earnings, and the percentage of pay-out of those earnings. The third, "Expense Patterns—Their Analysis for Electric Power Companies," scrutinizes the six individual operating expenses, taxes, and depreciation. The fourth, "A Ratio Analysis of Plant Investment and Utilization among Electric Power Companies," reviews the total plant investment, investment in production, transmission, and distribution plant, with appropriate measurements of their utilization. The fifth and last bulletin will be "Revenue and Consumption Characteristics of Electric Power Companies."

Parties interested in this material may obtain more information by writing to Dr. Earl P. Strong, director, Bureau of Business Research, College of Business Administration, Pennsylvania State University, University Park, Pennsylvania.

The March of Events

No Early Tie Line for Bonneville

REPRESENTATIVES of the Interior Department and the Bonneville Power Administration were persuaded during Senate hearings to defer negotiations for a privately developed Pacific Northwest-California power hookup. BPA and the Pacific Gas and Electric Company had been discussing possible construction of power transmission lines linking the two areas with the end view of exchanging power. California would utilize BPA's surplus power during the peak periods of the year. And PG&E would send power to BPA during its low power output months of the winter season. Senator Engle (Democrat, California), who asked for the hearings, complained that the government "apparently is trying to rush through another giveaway to private interests."

The exchange of power sought by BPA would help it prevent another operating deficit and might make it unnecessary for the federal agency to either raise its traditional $17.50 per kilowatt-year rate or make up the difference from its surplus. BPA Administrator William A. Pearl said there is no essential difference between the proposed contract with PG&E and those made with other utilities outside of Bonneville's service area for the sale of excess power. The tie-in plan will be given a complete review before any action is taken.

Utility Lawyers and Law Day

FOLLOWING the precedent of last year when it was first initiated, May 1, 1959, was programed "Law Day—U. S. A." by President Eisenhower under the sponsorship of the American Bar Association.

John B. Prizer, chairman of the ABA Section of Public Utility Law, and general counsel of the Pennsylvania Railroad, recently wrote to every member of that group following the instruction of the Council of the Section of Public Utility Law to call attention to the desirability of co-operating with the observance of Law Day.

In his letter to the utility lawyers, Mr. Prizer said in part: ". . . you, as individual lawyers and members of your local bar groups and communities, may find many opportunities for more direct and active participation. I, therefore, earnestly hope and trust that you will do so, whenever and wherever practical. We might also bear in mind, as practicing members of a specialized branch of the law, that no industrial group or its customers or its investors have a greater stake in the preservation of the majesty of our legal institu-

tions, and all they stand for, than the public utilities. I think you will agree that all of us who are concerned with the operation of these great public service enterprises in the public interest should, if possible to do so, make a special effort to bring the true meaning of Law Day home to our fellow lawyers and fellow citizens."

Gas Expansion Applications

Two subsidiaries of the American Natural Gas Company system have filed proposals with the Federal Power Commission to increase their gas supply by 201 million cubic feet a day from Canada and Louisiana. Michigan Wisconsin seeks authority to build pipeline facilities and purchase 158 million cubic feet of gas a day from Midwestern Gas Transmission Company and also to import 204 million cubic feet of gas a day from western Canada.

American Louisiana wants to expand the capacity of its pipeline by 43 million cubic feet a day to deliver more gas from southern Louisiana. Included in the plan is a program which calls for the building of two new compressor stations at a cost of $6,081,000, the use of which would make possible the delivery of the additional gas the company wishes to sell.

Included in Michigan Wisconsin's expansion plans are the construction of 311 miles of pipeline in Wisconsin, a new 5,280-horsepower compressor, 23 measuring stations, and 31 miles of pipeline in Illinois, 17 miles in Indiana, and 18 miles in Michigan. Cost of these facilities will be approximately $24,177,000.

Michigan Wisconsin hopes that by supplementing its existing supplies of natural gas from Texas, Oklahoma, and Louisiana, it can further diversify and insure continuity of its gas supply and service. Also, with gas coming into its system from both the North and South, a very high degree of operational security and flexibility may well be obtained.

Hays Appointed to TVA Board

President Eisenhower last month appointed former U. S. Representative Brooks Hays (Democrat, Arkansas) to the Tennessee Valley Authority to fill the unexpired term of Dr. Frank J. Welch. Hays, defeated last November over the segregation controversy, is reported to be popular with the liberal element of the Democratic party. As such, his nomination would be virtually unopposed regardless of his views.

Senator Estes Kefauver (Democrat, Tennessee), one of TVA's staunchest supporters in the Senate, said he respected Hays' integrity and ability but would want to question him about his views on power co-operatives.

Belgian Railroad Improvements

Twenty-five miles of Belgian railroad are to be converted to a completely remote control type of operation. It will consist of a double-track line with 12 stations along the way. One telecontrol will control all traffic. An optical control panel will show what is on the tracks, the progress of the trains, and the position of signals and switches.

Moreover, the operator will be able to tell from the panel what kind of train is traveling on any section of the tracks, be it international, local traffic, freight, etc.

District of Columbia

Electric Rate Increase

The Potomac Electric Power Company in the nation's capital has been granted permission by the public utilities commission of the District of Columbia and also by the Maryland Public Service

Commission to raise its electric rates by 7 per cent. The new rates were scheduled to become effective April 22nd. Pepco has a total of 341,497 customers in the Washington area, majority of which are residential households. The new rates will mean that the average monthly electric bill of $6.72 will go up to $7.27. Minimum bills will go from $1.25 to $1.50 under the new increase.

The District commission, in allowing the rate boost, said it found existing rate schedules unjust and that an increase was in order to allow a fair return upon company's investment and property, and also to finance a major construction program. The commission, however, observed that the company had overstated its financial plight in announcing in advance an appeal to be made later this year to raise the allowable rate of return.

Pepco subsequently secured a rate increase in the amount of $148,825 from the Virginia State Corporation Commission for a small area of Arlington county, Virginia.

Idaho

Power Line Conditions Urged

THE Department of the Interior has requested the Federal Power Commission to reserve "wheeling" rights for the Bureau of Reclamation in connection with licensing the construction of a transmission line which the Idaho Power Company wishes to build for use by its Brownlee-Oxbow hydroelectric projects.

The department has been negotiating with Idaho Power on the question and the company has expressed willingness to effect an agreement. However, Interior officials, although they had no reason to believe they would not reach a satisfactory conclusion, asked for the licensing conditions as a precautionary move in event negotiations might not prove productive.

The transmission lines under consideration would run north and west from Boise, Idaho, and would connect with a power pool in northwestern states. They either now or will interconnect with the Bonneville Power Administration transmission grid and those of the Washington Water Power Company and the Pacific Power & Light Company.

The Interior Department hopes to effect an integration and wheeling arrangement with Idaho Power Company which will result in increasing the firm power available for sale to preference customers of the Bureau of Reclamation's southeastern Idaho hydroelectric plants by 13,000 kilowatts.

Michigan

Fights Gas Service Loss

THE city of Detroit has gone to court to prevent Panhandle Eastern Pipe Line Company from abandoning service of 125 million cubic feet of natural gas a day to Detroit. Detroit's 700,000 natural gas users are involved in the impending court battle.

In December, 1958, and in February, 1959, the Federal Power Commission ruled in favor of Panhandle and the cutoff of gas was scheduled for March 15th. The state of Michigan and the city of Detroit as well as Michigan Consolidated vigorously opposed the contemplated abandonment. As a result the FPC set June 16th for a hearing to determine who will receive the diverted natural gas.

Now Detroit has taken the case to the U. S. court of appeals for the District of Columbia in order to show the city's determination not to lose the Panhandle supply of natural gas. The city's counsel, Robert E. Reese, pointed out that once the natural gas valves are shut off on the Panhandle supply, the cause will become more difficult.

Detroit officials contend that the city's huge number of natural gas users are pawns in a rate and supply war between Michigan Consolidated and Panhandle Eastern.

Oregon

State Power Bill Fails

THE Oregon house of representatives on April 20th failed to give constitutional majority to a house bill to establish a state power development commission with broad authority to engage in production and sale of electric energy. The vote was 29 for and 28 against, with 31 votes required for passage. Three members were absent.

The bill had already been referred back to committee for addition of a referendum clause to put the measure on the state ballot in 1960.

The proposal to put the state in the power business was vigorously opposed by the International Brotherhood of Electrical Workers, Utility Workers Union of America, and by a number of local unions representing other trade groups. The proponents claimed the main purpose of the bill was to give Oregon a public preference position for Columbia river federal power. The bill was identical, however, in many respects to the proposed initiative which last year failed to receive sufficient popular support to qualify for the state ballot.

The legislature was expected to adjourn without further action on this.

Pennsylvania

Gas Bills to Go Up

AN increase in the cost of wholesale natural gas supplies foreshadows an increase in gas bills for customers of Manufacturers Light & Heat Company in western Pennsylvania. The public utility commission has allowed the company $971,414 of a requested $6,376,875 annual rate raise—subject to refund.

Manufacturers said the increase would amount to $2.71 more a year for the average heating customer and only 72 cents a year for nonheating gas users. The increase was to be effective retroactively.

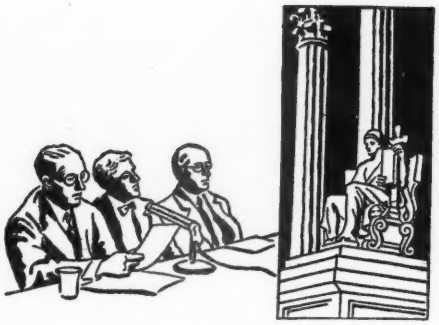
Virginia

Seven-city Gas Hike Asked

THE Atlantic Seaboard Corporation, which provides natural gas indirectly to the city of Richmond and six other Virginia cities, has asked the Federal Power Commission for a wholesale rate increase totaling $1,556,200 a year.

Atlantic supplies Commonwealth Natural Gas Corporation which in turn supplies Richmond, Petersburg, Hopewell, Suffolk, Newport News, Norfolk and Portsmouth.

The director of public utilities for Richmond, J. Edward Metzger, said he does not know what effect the increase would have on the city's gas rates.



Progress of Regulation

Trends and Topics

Limitations on Managerial Right to Choose Type of Security Issues

THE problem of selecting the class of securities to be issued in connection with financing is primarily a matter for decision by management under ordinary circumstances, it has been stated in several cases. Management's determination should be controlling, provided the terms under which the proposed securities are to be issued will not adversely affect public interest. This latter qualification of the general rule recognizes that there is a limitation upon managerial discretion.

Recognition of this managerial function is also found in cases dealing with hypothetical debt ratios. It has sometimes been stated that although selection of a debt ratio is a matter for management, a commission may adopt a hypothetical debt ratio for rate making (*"Rate of Return,"* by Ellsworth Nichols, p. 267).

SEC May Overrule Managerial Choice

The Securities and Exchange Commission disagreed with a holding company's argument that its choice of a bond financing was a matter within the area of managerial discretion which should not be disturbed. The commission referred to its decision in the Consumers Power Company case (33 PUR NS 321, 341), where it was noted that it is the commission's statutory duty to determine whether the exercise of managerial discretion conforms to the applicable standards of the Holding Company Act, including those of § 7, and such exercise is to be restrained if management proposes to issue securities not conforming to the standards presented by that section. Proposed financing was held not to be necessary or appropriate to the economical and efficient operation of the business of the holding company (27 PUR3d 142).

Commission Duty to Protect Public Interest

The New Hampshire supreme court said that the commission may consider

what type of securities are sought to be issued, and, if it finds that the type or types will probably affect injuriously the public interest in rates and service, or either, it may give appropriate weight to that fact in its decision. The commission may not directly determine and impose upon the utility a financial structure of its own devising, but it may approve all, none, or a part of the securities sought to be issued (16 PUR NS 322).

Commission Not Financial Manager

The New York court of appeals, back in 1909, said that laws giving the commission jurisdiction over the issuance of securities were not designed to make the commissioners the financial managers of the corporations, nor did they empower them to substitute their judgment for that of the board of directors or stockholders as to the wisdom of a transaction. Such laws were designed to make the commissioners the guardians of the public by enabling them to prevent the issue of stock and bonds for other than the statutory purposes (People ex rel. Delaware & H. Co. *v.* Stevens, 197 NY 1, 90 NE 60).

The New York commission, following this rule, said that the problem of selecting the classes of securities and the principal amount that should be issued and sold is a matter for decision by management, and under ordinary circumstances this determination should be controlling, provided the terms under which the proposed securities are to be issued and the resultant cost of money will not adversely affect public interest (98 PUR NS 251).

The Michigan commission once said that, in determining whether a public utility should be authorized to issue securities, the commission was limited to a consideration of the question whether the expenditures which were being financed were legal and such as might have reasonably been made by the corporate management, it not being the province of the commission to take upon itself the internal management of corporate business (PUR1917C 1).

Last year the District of Columbia commission granted the Potomac Electric Power Company authority to issue and sell convertible debentures. The commission recognized that differences of opinion may exist as to the most advantageous terms obtainable, but it said that ordinarily it would not interfere with the discretion of management in this regard if the utility shows a substantial basis for its selection of the various possible forms of financing, since naturally the burden of selection is the primary responsibility of management (23 PUR3d 310).

The North Carolina superior court stated its view as to the limitation upon managerial discretion when it said: "To justify interference with the fiscal policy of the utility, it must appear from the findings of the commission, supported by the record, that the issue terms proposed by the utility threaten to cause higher rates or threaten to impair the ability of the utility to serve the public." (8 PUR3d 439, 445.) The court in that case remanded a commission order containing a condition as to sale of stock. The North Carolina supreme court, without contradicting the general statement made by the lower court as to interference with managerial discretion, reversed the lower court on the ground that the commission had statutory authority to impose the condition

which was the subject of dispute in this particular case (11 PUR3d 10).

In an Arizona case it was said to be doubtful whether the commission had power to require a public utility company to issue stock instead of bonds (PUR1918D 381).

The Massachusetts commission, although not ruling on its power to order the issuance of stock rather than bonds as proposed by a power company, was of the opinion that it should not override the judgment of the company as to the manner it deemed best to raise funds (10 PUR NS 99).

Review of Current Cases

Water Rate Increase Authorized with Rulings on Expenses and Tax Savings

THE Pennsylvania commission approved a 40 per cent rate increase as proposed by the Connellsville Water Company. New rates will provide revenues sufficient to afford a rate of return of 5.96 per cent, as determined by the commission, based on a fair value rate base. In determining the rate base, due consideration was given to going-concern value.

Working Capital

Cash working capital was allowed as claimed. There was an average lag of forty-five days between payment of operating expenses and receipt of revenues. From the cash working capital requirement based on this lag, the average balance of accrued taxes was deducted. Materials and supplies were allowed in the amount of the five-year average of the average monthly balances in the account.

Depreciation

Annual and accrued depreciation was determined on estimates computed on age-life principles by the 4 per cent compound interest method, applied vintage by vintage. Plant ages were ascertained from the company's continuing property records, and estimated lives were based on engineering judgment. Annual depreciation was reduced by the amount of the depreciation applicable to contributions in aid of construction and customers' advances for construction.

Expenses

Along with current and past pension service cost, the company was allowed a moderate claim for supplemental annual payments to two former employees who had retired prior to the inception of the present pension plan. These supplemental payments will continue to be made during the remainder of the two employees' lives.

No such supplemental payments, however, will be made to newly retired employees.

Average injuries and damages insurance expense was allowed as determined for a five-year period. A somewhat higher claim for the current year, reflecting the insurance company's annual adjustment on the basis of the utility's experience, was disallowed. The claimed increase in this expense was attributable to an unusual increase in accidents during the year.

A nonrecurring contribution to a local industrial campaign designed to attract

new industries to the service area was not regarded as a proper operating expense. The average annual uncollectible accounts expense experienced over the preceding three years was allowed.

In estimating the effect of new customers added during the test year, the commission approved the use of a judgment operating ratio of 70 per cent applied to estimated additional revenue. This ratio was found by relating adjusted operating expenses, exclusive of depreciation and taxes, to actual operating revenues received during the test year.

Allocation of Income Tax Savings

The commission indicated that it would give primary consideration to the assignment to the company of an equitable portion of the benefits accruing from consolidated returns, as reflected by the actual decrease of current tax costs experienced during the test period. It was noted that the Internal Revenue Service requires tax savings to be distributed in conformity with § 1552 (a) (1) of the Internal Revenue Code, which provides for allocation of the consolidated tax liability in proportion to each member's contribution to taxable income.

The commission reaffirmed its practice of basing computations according to the method under § 1552 (a) (3) of the code, which supplements the former section by apportioning to the companies actually effecting tax savings through consolidation, the tax increases suffered through consolidation by some of the smaller participating companies. The commission fixed the company's tax savings at 11 per cent as against a claimed figure of 4.25 per cent. *Pennsylvania Pub. Utility Commission et al. v. The Connellsville Water Co. C. 16958 et al. February 24, 1959.*

FCC Does Not Have Primary Antitrust Jurisdiction

THE U. S. Supreme Court has held that the doctrine of primary jurisdiction is not applicable to the Federal Communications Commission, with regard to antitrust actions.

The Supreme Court said that the federal government, attacking an agreement between two broadcasting companies to exchange television stations on antitrust grounds, could bring an independent action without first resorting to the commission.

The legislative history of the Communications Act revealed that the commission was not given the power to decide antitrust issues as such, although federal antitrust policy could be considered by the commission in determining whether public interest, convenience, and necessity would be served by proposed action of a broadcaster.

In view of its decision on the question of primary jurisdiction, the court held that the federal government was not barred by laches because it had not instituted its antitrust action until more than eleven months after approval of the exchange agreement by the commission. Since the commission had no power to decide the antitrust issues, the government had no duty to enter the proceedings before the commission or to seek review of the license grant. *United States v. Radio Corp. of America et al. 3 L ed 2d 354.*

Proxy Solicitation Material Approved Despite Stockholder Objections

THE Securities and Exchange Commission has approved, subject to certain specified amendments, the proxy solicitation material submitted by Union Electric Company, a holding company, to its stockholders in connection with the annual stockholders' meeting despite the objections of two stockholders. The latter had submitted to the holding company, with the request that they be included in the proxy statement and proxy form, certain proposals which the stockholders intended to present at the stockholders' meeting. Nine of these proposals were omitted from the solicitation material.

Proposal to Censure Directors

The stockholders sought to have included in the proxy material a resolution which would censure all of the present members of the company's board of directors, who were also management nominees for re-election at the annual meeting, and declare all of them disqualified for re-election to office. The commission held that the company properly omitted this proposal since it applied to elections to office.

One stockholder argued that he was not requesting stockholders to refrain from voting for the re-election of the company's directors but was simply requesting that they declare the directors disqualified for office. The commission did not believe that such a distinction could be drawn since a stockholder could not logically vote for the stockholder proposal and at the same time vote for re-election of the present directors. It believed that the submission of this proposal would necessarily constitute an attempt to dissuade stockholders from voting in favor of management nominees. Therefore, it said, the proposal involved elections to office.

Discretionary Proxies

Another stockholder proposal which the company had omitted sought to prohibit the counting of proxies unless they were specifically marked for or against a matter voted upon. The commission pointed out that the proposal, as submitted by the stockholders, would have the effect of prohibiting the counting of any but marked ballots on any proposal listed in management's form of proxy and would thus prevent the voting of unsolicited discretionary proxies on proposals listed in the solicited proxy forms.

The proposal, in the form of a new bylaw, would curtail the right of an individual to give his agent an unsolicited discretionary proxy to vote on all matters presented at a meeting in contravention of a Missouri statute. The commission concluded, therefore, that the proposal was not a proper subject of stockholder action under Missouri law and that its omission from the proxy material was not contrary to the proxy rules.

Amendment to Articles of Incorporation

Another stockholder proposal which the company omitted was in the form of a proposed amendment to the articles of incorporation giving pre-emptive rights to the company's stockholders and increasing its authorized common stock. The applicable statute of Missouri, the company's domicile, provides that amendments to the articles shall be made pursuant to a resolution adopted by the board of directors setting forth the proposed amendment and directing that it be submitted to a vote at a meeting of shareholders, which might be either an annual or special meeting.

In view of this statutory provision, the commission agreed that the proposal was not in proper form for submission for action of security holders and might be omitted from the proxy material. In other words, as the company argued, a proposal to amend the articles may not be submitted by a stockholder directly to the other stockholders for their vote, because of that statutory provision.

Rights of Minor Stockholders

The commission held that the company properly omitted from its solicitation material a stockholder proposal which would permit a minor stockholder to vote by proxy. Under Missouri law, a minor may not appoint an agent.

Another proposal would require the company to accord to the parent or guardian of a minor stockholder all rights incident to the ownership of stock. An opinion of the company's counsel indicated that such rights might not in all instances legally be exercisable by the parent or guardian. For these reasons, the commission concluded that such proposals were properly omitted.

Statements in Proxy Material

A stockholder objected to a management statement in opposition to his proposal included in the proxy material calling for action of the board of directors to amend the articles of incorporation to restore pre-emptive rights. He argued that the statement was too long because it exceeded 100 words.

Where a stockholder's proposal which is included in management's solicitation material is opposed by management, the applicable rule provides that the stockholder may have included in the proxy statement, a statement by him of not more than 100 words in support of his proposal.

The commission recognized as reasonable a limitation of the length of a stockholder's statement in support of his own proposal included in the management's material, at the expense of the corporation. But, it said, the same considerations of policy do not apply to statements made by management in its own solicitation material. Accordingly, it rejected the stockholder's contention. *Re Union Electric Co. File No. 68-175, Release No. 13962, March 26, 1959.*

Hawaii Commission Rules on Accelerated Depreciation

THE Hawaii commission, in granting a modified rate increase to a transit company, was confronted, for the first time, with a utility which had elected to take advantage of accelerated depreciation under §§ 167 and 168 of the Internal Revenue Code of 1954. The commission was of the opinion that normalization of taxes, with the reserve for deferred taxes deducted from the rate base, is the most equitable method for rate-making purposes.

The procedure to be followed, said the commission, is that the normal taxes be set up as a charge against operations for rate-making purposes and the deferred taxes flow to a reserve for future pay out. The deferred tax reserve should be deducted from the rate base, in addition to the regular depreciation reserve deductions, because the ratepayer has contributed the amounts in the deferred tax reserve prior to the due date for payment to the government and should not be required to pay a return on it in the meantime.

By handling the reserve in the manner outlined above, the commission noted, the

utility itself has the advantage of the interest-free capital to assist it in modernization and expansion of plant, and the ratepayer is protected from paying rates predicated on a rate base which has been increased by the amount of this reserve to which he has contributed.

Nonutility Affiliate

The transit company had invested in a subsidiary corporation set up to handle nonutility holdings. It seemed to the commission that a return should be anticipated from the investment as a source which might contribute towards the company's financial requirements. The commission also noted that a loan in excess of $300,000 had been made by the transit company to the subsidiary, and that the source of the sum had been the depreciation reserve. The commission commented that depreciation reserve funds should be kept so invested as to be as nearly liquid as possible and should not be loaned or advanced to a subsidiary corporation or invested in any corporation in which the company is interested.

Increased Fares

The commission granted an increase in the fare for Around-the-Island tours from $4 to $5.50, and approved an increase from 50 cents to one dollar in commission to agents selling the tour trip. To stimulate payment of cash fares, the commission ordered that the number of tickets to be purchased be changed from two for 30 cents to five for 75 cents. The increase authorized would result in a return of 6.82 per cent and an operating ratio of 95.33 per cent, which the commission considered reasonable. *Re Honolulu Rapid Transit Co. Ltd. Docket No. 1375, Decision & Order No. 970, March 19, 1959.*

Fuel Oil Dealers Have Right to Intervene in Distributor's Proceeding for Gas Supply

A FEDERAL court of appeals has upheld the right of fuel oil dealers to protect their competitive interests in a proceeding by Blue Ridge Gas Company before the Federal Power Commission to obtain a supply of gas from Atlantic Seaboard Corporation, an interstate pipeline company, with which to furnish natural gas service in Harrisonburg, Virginia. Before ordering the gas supplied as requested, the commission had denied intervention on the ground that the questions which the dealers sought to raise concerned local distribution which had already been reso[illegible] by the state commission in its authori[illegible]on of the local service.

Power over Intervention

The commission asserted that it has the power to exclude from intervention competitors who, it thinks, are unable to represent the public interest or who are not needed as parties for that purpose. Given as the ground for this claim was the proposition that such competitors might introduce duplicative and irrelevant evidence, unnecessarily prolonging the administrative proceeding and tending to make it unmanageable.

The court could not agree that the commission has such power or that it should have it in order to perform its functions. Efficient and expeditious hearing should be achieved, said the court, not by excluding parties who have a right to participate, but by controlling the proceedings so that all participants are required to adhere to the issues and to refrain from introducing cumulative or irrelevant evidence.

The court also rejected the commission's argument that it could deny intervention in this case under amended § 1(c) of the Natural Gas Act, exempting from federal jurisdiction matters of local concern. The amendment does not concern itself with intervention rights.

As a result of the gas service from Atlantic to Blue Ridge, fuel oil would be in competition with natural gas introduced into Harrisonburg through interstate commerce. The fuel oil dealers would be directly competing for fuel revenues with both Blue Ridge and Atlantic, the latter being subject to the jurisdiction of the Federal Power Commission.

The commission's orders were reversed and remanded with directions to allow intervention and to conduct a new hearing on the Blue Ridge application for gas service from Atlantic. *Virginia Petroleum Jobbers Asso. v. Federal Power Commission et al. Nos. 14,583, 14,731, March 19, 1959.*

Lessor of Utility Facilities Held to Be Public Utility And Operating Lessee a Mere Agent

A PENNSYLVANIA equity court dismissed a petition by Sayre Land Company for an injunction to compel the Pennsylvania commission to discontinue proceedings to determine whether the company was a public utility. The court held that the commission had jurisdiction to determine the question and that the company was in fact a public utility.

Many years ago the Sayre Land Company constructed water utility facilities to serve the village of Sayre (which it developed) and other communities. It leased the facilities to the Sayre Water Company, which has operated the utility, applying rates filed with the commission. It was provided under the lease that the water company would pay over to the land company, as a "lease rental," all of the net earnings in excess of $300 a year. The water company was forbidden to issue more capital stock. Common directors and officers served the two companies.

Under Pennsylvania law the commission is given jurisdiction over public utilities, which are defined as owners or operators of utility facilities. For the purposes of this proceeding, facilities are further defined under the statute as property used to develop, distribute, or furnish water to the public for compensation.

Ownership Is the Test

The test of public utility status, then, is ownership or operation of utility facilities. Sayre Land Company owned the bulk of the facilities used in the water utility operations. The court found it inescapable, therefore, that the Sayre Land Company was a public utility. It further found that it was a mere agent of the land company, under the latter's control.

The fact of common directors and officers was one substantial indication of agency. The most impelling evidence of control and agency, however, was the "lease rental" payment by the water company of its entire net earnings in excess of $300 a year. Only the land company would benefit from increased rates, additional customers, or an increase in the rate base. Dividends on the water company's capital stock could not increase because of the limitation on the retention of earnings. The court likened these companies to an Edgar Bergen-Charlie McCarthy relationship.

Delegation of Power

Notwithstanding these facts, the land

company urged that it should not be held to be a public utility because there had been an unlawful delegation of legislative power. The court agreed that the legislature cannot delegate its power to make a law. But it can make a law to delegate a power to determine facts upon which the law makes its own action depend. Under the statute, it became the function of the commission merely to determine the existence of the fact of ownership or operation of utility facilities. On the facts so found, the law applied.

Equal Protection

Next, the land company argued that if the commission exercises jurisdiction over it, then the commission should similarly take jurisdiction over all owners of property used in utility service. Mere ownership alone, however, has not in the past been considered by the commission as a reason in all cases for exercising its complete jurisdiction. The company had no standing to advance this argument. It owned the property used in the water utility service, it dominated and controlled the so-called "lessee," and it obtained all the benefits of the water company's operations.

The lessee itself "has nothing to look forward to in the future except its bare corporate existence," the court noted.

No Impairment of Contract

Finally, it was contended that recognition of the commission's jurisdiction over the land company would lead to serious results. There would be impairment of contract, undue interference with management, a need for corporate reorganization, and other matters, it was said.

Again the court disagreed. The only result would be that the two companies, one having ownership and the other operation, would be joined together, so far as regulatory control is concerned, to make the two one public utility enterprise. There would be no impairment of contract. It is the nature of a corporation's activities that determine its utility status, not the act under which it is formed. Nor can a public utility in fact escape regulation on the ground that it has no charter right to render utility service.

Regulation by Sovereign Right

The commission's primary objective is to ensure adequate service to the public at reasonable rates. Subsidiary functions of controlling accounting and supervising financial structure are vital to the accomplishment of the primary objective.

In this case, the commission could not accomplish its primary purpose by looking only to the water company. It could not effectively direct Sayre Water Company to make extensions, for the company could plead poverty. "Three hundred dollars buys mighty little pipe," it was noted. Nor could the water company be made to submit original cost data on property. They are in the books of the land company.

Nor is it enough to say that Sayre Land Company will co-operate. Regulation does not hang by a mere thread of co-operation. In order for the commission's regulation to be effective, it must be grounded on authority to require action as a sovereign right, through the legitimate exercise of the police power and not by way of gratuitous co-operation on the part of utility property owners. *Sayre Land Co. v. Pennsylvania Pub. Utility Commission, No. 2117 Equity Docket, No. 150½ Commonwealth Docket 1954, March 9, 1959.*

Commission Lacks Authority to Compel Service Extension into Nondedicated Territory

THE California supreme court held that the commission may properly regulate the terms on which service extensions into new areas may be voluntarily made, and the service which must be given within an area to which the utility is dedicated. However, the commission cannot compel a water utility to extend mains into a wholly new, proposed residential community to be created by a subdivision in a nondedicated territory, on terms other than those agreed to by the utility. Neither may the commission accomplish that result by itself proposing the terms on which the utility would contract to enter a new territory, order the utility to enter into such a contract, and then compel it to perform that contract.

The commission is not charged with enforcement of private contracts, said the court.

Its function is to regulate public utilities and compel enforcement of their duties to the public but not to compel them to carry out their contract obligations with individuals.

The water company, by the act of signing agreements stipulating conditions under which it would extend service to the new subdivisions in the previously nondedicated area, was held not to have made a dedication of its property to the public use in such an area. The agreements did not clothe the commission with authority to compel extension of mains and conduits on conditions other than those specified by the utility in the agreement.

A utility may limit its dedication of facilities to a territorial area, pointed out the court. In measuring the territorial scope of dedication, the municipal boundaries may ordinarily be used as a guide. Because the company claimed the right to extend service into the remainder, it could not be inferred that the company had dedicated its service to the remainder. A claimed privilege cannot be transmuted into an avowed obligation, particularly where the contemplated possible future service has been expressly made conditional on explicit commission approval of the extension plan. *California Water & Teleph. Co. v. California Pub. Utilities Commission et al. 334 P2d 887.*

Direct Action Required to Set Aside Certificate Transfer

IN seeking to set aside an underhand transfer of carrier operating rights, the Mississippi commission pursued a wrong procedural course, it was held on appeal to the Mississippi supreme court. Although the high court affirmed a lower court reversal of the commission, it did so without prejudice to the commission and others to proceed anew against the wrongdoers.

The commission had approved a transfer of a motor carrier certificate from an individual to a corporation, having been led to believe that the individual intended to convert his business into a corporate organization and continue the carrier service. Directly after this transfer, however, the stock in the corporation was transferred to other parties pursuant to a preconceived plan to deliver the operating rights to such parties without obtaining the commission's approval.

Following this development, the commission issued an order to show cause why

the stock transfer should not be set aside. In due course the corporation and its stockholders were directed to cease and desist from further operations under the certificate. The court ruled that the show-cause order should have been directed to the certificate transfer and not to the stock transfer. The commission is free to proceed again. *Mississippi Pub. Service Commission et al. v. Walter M. Chambers, d/b/a W. M. Chambers Truck Line et al. 108 So2d 550.*

Rate Comparison between Different Utilities Not Controlling

THE Massachusetts commission approved a rate increase for an electric company, which would result in a return of 5.59 per cent on the net plant in service plus materials and supplies rate base. The commission noted that the company's rates were among the highest in the commonwealth and that the approved rates increased the disparity between the rates applicable to the company's customers and those applicable in neighboring areas.

The commission, however, said that in the rate-making process comparisons between different utilities with different load characteristics are not valid criteria for assessing the reasonableness of rates. The commission is bound by law to permit a utility a reasonable return on its capital prudently invested for public utility purposes.

Obviously, said the commission, some companies experience higher costs per customer than other companies, and these higher costs must result in higher rates if the company is to earn a reasonable return.

The character of the territory served did not permit the company to furnish power at rates comparable to those in effect in areas of more concentrated population and greater industrialization. The situation was further aggravated by the fact that the industrial load was, in this company's case, not substantial and depended almost entirely on the fortunes of one customer.

Rate Differential

The commission agreed with the company that it would be unfair to the large majority of customers to place the burden of increased costs occasioned by the underground system on the many customers who did not benefit by it. The approved rates permitted recovery of the differential between overhead and underground system rates.

The commission also approved a provision, inserted by the company in its availability clause, to the effect that the company would not extend its underground distribution system beyond the limits in effect at the time of filing. The provision also stipulated that the company had an option of serving customers by overhead or underground system where municipalities granted pole locations on any street or streets, but that the customer would be billed on the basis of the rates applicable to overhead service from the time of such grant.

The differential, the commission noted, had increased in recent years, and the company's underground system was old and required high maintenance and replacement costs. In view of these facts, it was undesirable from the standpoint of the great majority of the customers to extend the system further. *Re Southern Berkshire Power & Electric Co. DPU 12614, April 1, 1959.*

Franchise Determinative of Right of Certificated Transit Companies to Serve Annexed Area

THE Nebraska commission acted unreasonably and arbitrarily in denying an application of the Omaha Transit Company to extend its lines to a suburban area newly annexed by the city of Omaha, the Nebraska supreme court held. The order was reversed and remanded to the commission.

Three transit carriers were involved in this proceeding. Two carriers were serving the suburban area at the time of Omaha Transit's application. They were duly certificated by the state commission but had no franchise from the city to operate in the annexed area. Omaha Transit had both a certificate and a franchise. The commission apparently assumed that the two protesting carriers had a right to continue serving the annexed area, finding that competitive service by Omaha Transit would result in substantial injury to them and impair their ability to continue to operate in suburban areas which would not be otherwise served.

The Nebraska Constitution provides that the legislature shall not pass any general law granting the right to construct and operate a street railroad within any city without first requiring the consent of a majority of the electors of the city. This provision has been generally construed to apply to all means of mass transportation in a municipality without regard to motive power or the method of its application.

No Issue of Competition

In view of this constitutional provision the granting of Omaha Transit's application would not have infringed upon any legal right of the other two companies because, having no franchise from the city, neither of them could legally operate in the annexed area. This is not a situation where one carrier is requesting authority to operate in competition with other carriers already in the field, said the court. Rather, it is one of a unitary mass transportation system of a city being allowed to extend one of its existing routes to a suburban area which, because of development, has become an integral part of the city.

It should be resolved on the basis of public interest rather than as a choice between competing carriers.

It was not disputed that Omaha Transit could provide preferable service to downtown Omaha. Implicit in the right of the residents of the annexed area to have city transit service of the same character furnished to other residents of the city comparably situated is the existence of present and future public convenience and necessity, the court declared. Additional proof of public convenience and necessity was in the record. It may be found in operating economies and those things which contribute to expedition, public safety, efficiency, and convenience in operation, it was pointed out.

Service at Loss Argued

The fact that the proposed service in the annexed area would not be profitable was considered by the court to be of no significance and no reason for denying the application of Omaha Transit. The company was bound by its franchise contract to provide adequate transportation service in any part of the corporate limits where public convenience and necessity demanded it. Service must be furnished in such circumstances whether it is profitable or unprofitable. The court further indicated that Omaha Transit's operation may not be fragmentized as the commission had attempted to do in this case. *Re Omaha Transit Co. 94 NW2d 461.*

Unreliable Evidence Invalidates Rate Order

THE Florida supreme court struck down a commission rate order, finding it invalid on its face. The commission had determined that a group of motor carriers, operating interstate and intrastate, required additional revenues in order to earn a reasonable return, and a rate increase was authorized.

In making its determination, the commission had used a separations study of one representative truck line. While the court considered the study of a representative carrier a sound exercise of administrative powers, it appeared that the separations study was unreliable. The commission itself had stated: "While we feel that the study did not follow the stipulated procedure, and is, therefore, unreliable, we must make some use of it because we have no other source from which to draw in making the necessary apportionment of revenues and expenses."

By its own statement the commission had found the separations study "unreliable," though "necessary" to its conclusions, and further indicated that the study was used in its determinations. The commission cannot ground an essential portion of its order solely on evidence which it characterizes as unreliable, said the Florida court.

Such evidence fails to meet the administrative evidentiary standard of competent substantial evidence. *Florida Rate Conference et al. v. Florida R. & Pub. Utilities Commission et al. 108 So2d 601.*

Transit Fare Increase Required to Cover Cost of Operation

THE Connecticut commission granted a transit company's request for increased rates, noting that the increase would produce an operating ratio of 99.4 per cent, just enough to permit the company to pay the costs of operation and provide safe and efficient service. The company's president had stated that the company was not seeking a schedule of fares that would afford sufficient revenues to pay a return to investors.

The commission noted that all it could do, in the light of evidence of declining patronage, was to predicate the rate determination on the justifiable premise that the continuing decline would go on unabated during the immediate future. Improved roads and parking facilities are being provided in urban centers, the commission said, and, consequently, more and more individuals are being induced to use their own cars in lieu of regular route motorbuses.

Fare increases are not the only answer to the current plight of the motorbus industry, the commission pointed out. Such increases cause further passenger resistance to higher fares. However, the commission could not, in accordance with fundamental constitutional principles, require any motorbus operator to render service at a continuing loss. *Re Connecticut R. & Lighting Co. Docket No. 9743, March 18, 1959.*

Collection Expense Not Unreasonable

THE Pennsylvania commission did not consider unreasonable a 5 per cent commission paid by a water company to a lumber company for collection. The ar-

rangement, noted the commission, provided a convenient location for the payment of water bills by approximately one-third of the water company's present customers.

The commission approved the company's proposed rate increase, which would provide a return of 4.99 per cent on the fair value rate base found. In determining fair value, the commission gave no consideration to company figures on book cost. The book amounts had been overstated to the extent of unrecorded retirements. Furthermore, the depreciation reserve applicable to book cost was not an actual measure of accrued depreciation because subsequent to 1918 credits to the reserve had been based upon the depreciation rates of the Internal Revenue Department for income taxes. *Borough of Bridgeport v. Bridgeport Water Co. C. 16755, March 23, 1959.*

Other Recent Rulings

Certificate Revocation Justified. The North Dakota supreme court held that evidence that a common motor carrier had permitted freight to accumulate at its dock and had made no attempt to move such freight, and that the company had no regular office or telephone facilities where it could be contacted by prospective shippers supported a commission finding that there had been an abandonment of service justifying revocation and cancellation of the certificate. *Superior Service Co. et al. v. Nelson et al. 94 NW2d 84.*

Electric Company Return. The Massachusetts commission considered reasonable a return of 6.27 per cent on an electric company's net investment rate base. *Re Quincy Electric Co. DPU 12591, February 16, 1959.*

Telephone Company Return. The Wisconsin commission considered reasonable a return of 6.6 per cent on a telephone company's net investment cost rate base. *Re Rhinelander Teleph. Co. 2-U-5093, February 20, 1959.*

Spur Track Abandonment. The U. S. court of appeals held that spur, industrial, team, switching, or sidetracks could not be abandoned without commission approval where such tracks were impressed with functions beyond those normally ascribed to them, such as constituting the sole terminal facilities held out to the public for access to the main line. *Meyers et al. v. Jay St. Connecting Railroad et al. 262 F2d 676.*

Description Not Clear-cut. The U. S. district court affirmed the Interstate Commerce Commission's denial of an application for a revised permit authorizing extension of service as a freight forwarder where the evidence sustained the finding that there was no clear-cut and definite description of the specific service, or its territorial extent, which the applicant proposed to perform if the authority sought were granted. *ABC Freight Forwarding Corp. v. United States et al. 169 F Supp 403.*

Certificate Amendment. The Colorado supreme court held that the commission's right to amend any order does not authorize an amendment which provides for an

entirely new passenger service which the certificate to be amended expressly precludes, and that such a service can be granted only pursuant to the statute authorizing the commission to issue certificates. *Colorado Pub. Utilities Commission et al. v. Donahue (Airlines Cab Service), 335 P2d 285.*

Findings Unreviewable. The Illinois supreme court refused to consider an alleged lack of subsidiary findings necessary to support an ultimate finding in a rate order, in view of the petitioner's failure to raise the point in the petition for rehearing before the commission. *Meinhardt Cartage Co. v. Illinois Commerce Commission, 155 NE2d 631.*

Certificate Approval. The Kentucky court of appeals affirmed a commission grant of a contract motor carrier permit where there was substantial evidence to sustain the commission's findings of public convenience and necessity and to establish that the rate approved was comparable to rates charged by common carriers rendering similar services. *Hazard Express et al. v. Kentucky Dept. of Motor Transp. et al. 320 SW2d 617.*

Wrecker Carrier Certificate. A Missouri court of appeals upheld a commission order certificating a wrecker business as a carrier of wrecks even though one such carrier already operated in the area, where the commission had found, in its sound judgment, that the sizable volume of wrecker business in the area demanded the service of another wrecker carrier. *Missouri ex rel. Egan v. Missouri Pub. Service Commission, 319 SW2d 917.*

Reparation for Freight Overcharge. The North Carolina supreme court upheld a commission order granting reparation to a shipper for overcharges resulting from railroads' faulty measurement of distance of the haul, and the court ruled that the commission was the proper forum for the proceeding. *North Carolina ex rel. Utilities Commission v. Norfolk Southern R. Co. et al. 106 SE2d 681.*

Use Classification Discriminatory. The Oregon supreme court held that the use to which water was put by various consumers of a city plant was not, by itself, sufficient to justify a difference in rates to be paid by such consumers. *Kliks v. Dalles City et al. 335 P2d 366.*

Notice of Rehearing. The Pennsylvania superior court held that there is no requirement that notice of the refusal of an application for rehearing be served in any specified manner, and that the commission's adoption of a policy of advising the parties by letter of the denial of petitions for rehearing fell within its administrative discretion. *Pennsylvania Dept. of Highways v. Pennsylvania Pub. Utility Commission, No. 49, March 18, 1959.*

Bona Fide Interstate Commerce. The Pennsylvania superior court, in issuing a cease-and-desist order against a motor carrier, held that interstate commerce, to be entitled to protection as such must be real and bona fide, not a subterfuge, through circuitous routing, to provide what is in fact intrastate service. *Jones Motor Co., Inc. v. Pennsylvania Pub. Utility Commission, No. 53, March 18, 1959.*

Priority in Reserved Gas. In denying a rehearing, the Federal Power Commission refused to recognize any priority on the part of consumers of a particular area in the reserved gas supply of a natural gas pipeline company even though such consumers may have contributed, as ratepay-

ers, to the development of the pipeline system; they presumably paid no more than a reasonable rate and, therefore, had no more right to the reserved gas than other customers. *Re American Louisiana Pipe Line Co. et al. Docket Nos. G-10396 et al. February 13, 1959.*

Rates in Certificate Case. In denying rehearing in a natural gas pipeline certificate case, the Federal Power Commission pointed out that, without consideration of the proposed price or rate, no determination can be made whether the proposed service or facilities satisfy the requirements of public convenience and necessity, as provided in § 7 of the Natural Gas Act. *Re Transcontinental Gas Pipe Line Corp. et al. Docket Nos. G-12059 et al. February 13, 1959.*

Transit Rates Go Up. An increase in transit fares for Philadelphia, from 20 to 25 cents for cash fares, with appreciable increases for token and school fares, was approved by the Pennsylvania commission as requested, since the increased rates would provide a rate of return of only about 2 per cent. *Pennsylvania Pub. Utility Commission et al. v. Philadelphia Transportation Co. C. 17075 et al. February 24, 1959.*

Inspection of Pipeline. Following the rupture in an interstate natural gas pipeline in New Jersey in 1957, resulting from a defect which occurred during construction of the line, the New Jersey commission, after investigation, ordered a number of safety precautions to be taken, including more frequent routine inspections, installation of automatic valves, and pressure tests and X-rays of sample sections of the line. *Re Algonquin Gas Transmission Co. Docket No. 10844, February 26, 1959.*

Railroad's Safety Directive. The New Jersey commission refused to delete, from a safety order, directives that lift spans be raised to full open position for the passage of all water-borne traffic and that no employee of the railroad disqualified for road passenger service as an engineer, for medical reasons, be permitted to act or serve as fireman in such service. *Re Central R. Co. of New Jersey, Docket No. 10920, March 17, 1959.*

Discontinuance Factors. The Connecticut commission, in authorizing a transit company to discontinue operation of a route commented that in determining whether public convenience and necessity require continuation, consideration must be given to the cost of the service, the use by the public, the availability and adequacy of other transportation facilities, and the overall financial condition of the company rendering service. *Re Connecticut R. & Lighting Co. et al. Docket No. 9733, March 19, 1959.*

Grandfather Authority Not Final. The New York commission held that it could validly impose restrictions upon authority granted under the grandfather clause, since issuance of a permit under the grandfather clause confers no property or proprietary rights in the use of the public highways and the commission is specifically authorized by statute to attach reasonable terms, conditions, or limitations consistent with the public interest, not only when a permit is issued, but also from time to time thereafter. *Re Monaco Stages, Inc. Case 20204, March 30, 1959.*

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Pioneer has specialized in designing power plants for 57 years. It offers design service for fossil fuel, hydro and atomic plants. It will also assist in forecasting load growth, in site selection, in purchasing and expediting of equipment and in supervising construction. Pioneer's other services include substation, transmission and distribution studies and design.

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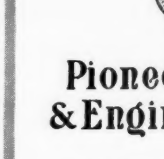
Pioneer's services in corporate matters include business and management engineering advice, financial, accounting and tax counsel and insurance and pension plans and programming. It operates a stock transfer and dividend disbursement service and maintains stock ledgers when desired.



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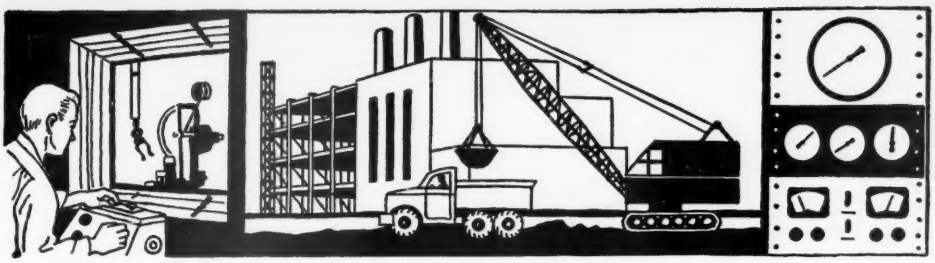


Industrial Progress

Union Electric Plans $312,000,000 Program

) meet an estimated 40 per cent in-ease in electrical demand by 1963. nion Electric Company (St. Louis, o.) plans to spend $312 million on w and expanded facilities over the xt five years, according to the an-al report to stockholders.

Major projects will include con-ruction of a fourth generating unit Meramec, to be completed in 1961 d the first unit of a new power plant heduled for completion in 1963. nese units will add about 700,000 owatts of generating capacity. In dition, as the load grows, there will major additions to the transmission d distribution system.

During 1958, the company spent 2,786,000 on new plant and service cilities. Of this amount, $11,234,000 s spent to complete the 307,000-owatt third unit at Meramec.

oller-Smith Issues Switchboard Instrument Catalog

ATALOG 4220, a 24-page bulletin vering instruments designed for neral switchboard applications, has en published by Roller-Smith, Inc., bsidiary of Federal Pacific Electric .

In all thirteen types of switchboard strum nts are detailed. These are: amm ters, a-c milliammeters, a-c ltmet s, a-c frequency meters, a-c ttmet rs, synchroscopes, power fac-r met s, "VAR" meters, d-c am-eters, d-c milliammeters, d-c volt-eters, d-c millivoltmeters, and tem-ratur indicators.

Comp ete descriptions and technical forma ion are supplied on mecha-sm ty es, accuracy, scale length, rat-g, terminals, dimensions, weights, ses and list prices. Photographs of ch inst ument are included with ad-tional cutaway views of both the a-c and the d-c devices.

Also covered in the catalog are such accessories as instrument transformers, direct current shunts, switchboard shunts and external leads.

Copies may be obtained from Roller-Smith, Inc. 50 Avenue L, Newark 1, N. J.

$2,000,000 Slated for Construction in 1959 By Northwestern Public Service

NORTHWESTERN Public Service Company (Huron, South Dakota) will spend over $2,000,000 in 1959 to expand both electric and gas facilities to serve new areas and new customers and to improve and enlarge present facilities.

Electric construction projects for 1959 include new transmission lines, street lighting, plant improvements, transformer changes, changing of feeder lines and capacity changes. It is also planned to purchase a new portable substation that will be used in emergencies and for normal rebuilding and maintenance of facilities.

Alabama Power Awarded Edison Award

THOMAS W. MARTIN, chairman of the board, Alabama Power Company, recently received for the company the electric industry's highest honor. Known as the Edison Award, it was given for "exceptional business statesmanship" in developing the water resources of the Coosa and Warrior river systems.

The presentation was made by J. E. Corette, president of the Edison Electric Institute, at the close of the Institute's 27th annual convention. The Edison Award was given for the first time this year, taking the place of the Charles A. Coffin Award, which had been presented annually at previous EEI conventions.

Alabama Power Company was cited by the judges "For exceptional business statesmanship in conceiving a comprehensive program for the complete development, by use of private investor capital, of the water resources of the Coosa and Warrior river systems in Alabama, for its effective public information program regarding this project, for obtaining necessary Congressional legislation and the approval of Federal bodies required to carry it out, thereby providing the State of Alabama with valuable power, navigation and recreational facilities, together with flood control and conservation of the water resources of the State, all accomplished without major controversy and all contributing importantly to the public welfare and the economic growth of the whole State."

The 421,700-kilowatt Coosa river project consists of four new dams and a reconstructed powerhouse and an increase in the size and capacity of an existing dam.

On the Warrior river, Alabama Power is constructing the Lewis Smith Dam. It also has a license to install a power plant at the government dam formerly known as Lock 17 and more recently named Bankhead Lock and Dam. It has a preliminary permit relating to the installation of generating facilities in the navigation dam to be built by the government at Lock 13 on the Black Warrior river.

Alabama Power was selected for the Award through a sequence of nominations by a panel representing every section of the nation, analysis of accomplishments of the nominated companies by a review committee, and a decision by a committee of judges. Judges were Dr. J. D. Ryder, Dean of Engineering, Michigan State University; C. W. Kellogg, Past President of the Edison Electric Institute; and Mr. Corette.

(Continued on page 22)

Black Hills Power & Light to Build New 22,000-kw Plant

PLANS to build a new power plant were revealed recently at the eighteenth annual shareholders' meeting of the Black Hills Power and Light Company.

To be called the Ben French station, the new power plant will have an initial 22,000 kilowatt nameplate capacity, approximately the amount of electricity needed to serve Rapid City. Mr. Simpson told the group that the turbine generator unit has been ordered from the Allis-Chalmers Manufacturing Company. The steam generator unit will be fired by a "cyclone" furnace.

New FWD Booklet Shows Vehicle Versatility

A NEW eight-page booklet showing and telling how FWD Corporation, Clintonville, Wis., has solved some of the world's toughest heavy-duty vehicle problems now is available.

The booklet contains 20 illustrations of FWD facilities and vehicles. It lists the industries and markets served by the company, shows examples of the unusual vehicles produced for those markets and tells how each vehicle solved specific problems and gave the user a more effective operation.

Industries and markets covered include electric utility, ready-mix concrete, logging, highway transport, military, fire fighting, oil, mining and road maintenance.

Write for "World's Most Unusual Vehicle Facility" booklet to FWD Corporation, Clintonville, Wis.

Consolidated Edison Orders Second 340-MW Turbine From A-C

CONSOLIDATED Edison Company of New York, Inc., recently ordered another 3600/1800-rpm close-coupled cross-compound steam turbine and fully-supercharged generating unit from Allis-Chalmers. It is similar in arrangement and rating to the 340-mw unit that Consolidated Edison now has on order with Allis-Chalmers for unit 4 of the Astoria station. Steam conditions for Astoria 4 are 2000-psig, 1050/1000 F and 2.0 inches Hg absolute exhaust pressure.

Both units incorporate many improved design features to control expansion and minimize distortion in the high-temperature elements. The 1800-rpm generator as well as the 3600-rpm generator is fully supercharged. In these generators both the rotors and the stators are conductor-cooled.

Powers-American Adds to Line of Hydraulic Hole Diggers

A NEW addition to its line of hydraulic hole diggers has been announced by the Powers-American division of McCabe-Powers Body Company. The new unit, designated Series EM-2 "Earth-Master" Hydraulic Hole Digger, digs straight clean holes up to 10′ 6″ deep and 9″ to 30″ in diameter, according to Brooke Daly, company vice-president.

This fully-powered digger is designed for use with a "live-boom" derrick, such as the Powers-American Series PM-2 "Pole-Master" Hydraulic Derrick. Power is supplied by a hydraulic pump driven by a full-torque drive assembly on the truck transmission. A reversible hydraulic motor rotates the auger; automatically shifts to low speed for digging and to high speed when auger is fully raised for "spin-off." A separate hydraulic motor feeds and raises the auger under power.

The auger is guided at all times by a rigid twin-column telescopic support frame which rests on the ground during digging. The frame is attached to a universal joint mounting bracket on the derrick which permits digging at angles, in close quarters and hard-to-reach spots inaccessible to fixed position diggers. Power feed of the auger, combined with down pressure which can be applied with the hydraulic derrick, enables the unit to dig quickly in any type of soil, even that which is exceptionally hard or frozen.

Descriptive Bulletin No. 212 and price information may be obtained from McCabe-Powers Body Company, 5900 No. Broadway, St. Louis 15, Mo.

G-E Will Study Lightning Effects On Pennsylvania Electric High-Volt Line

THE General Electric Company's High Voltage Laboratory will co-operate with Pennsylvania Electric Company, Johnstown, Pa. in making an extensive study of the lightning performance of an experimental, 460,000-volt electric power line to be built in Pennsylvania.

Plans for the 12½ mile line were announced recently by Penelec. A major portion of the apparatus associated with the line will be furnished by General Electric, including a 460 transformer for one terminal, wi ing and coupling equipment f terminals, complete arrester pr and half of the line insulat insulator hardware.

For the lightning study magnetic models of towers, tors, and terminal equipment built in the Laboratory and test "artificial lightning" to pre lightning performance.

Penelec's 460,000-volt line wil built in a rugged and mou area subject to a large number trical storms and lightning The area's "isokeraunic le measurement of lighting fre is about 60% above that of B County in western Massachus where General Electric and six operating companies are now a 4½ mile prototype transmissio Project EHV, which will carry po at various voltages up to 750,000 v

Dr. Pier A. Abetti, manager Project EHV, announced that his ganization would join with Penele the instrumentation of the 460,0 volt line and carrying out the st "After the line is built," said Abetti, "we shall determine its haviour under lightning, through use of instruments which measure the characteristics of lightning. shall evaluate the actual results, compare them with what we dicted."

It is vitally important, Dr. Ab said, that high voltage research various areas be co-ordinated. G eral Electric's participation in Penelec project assures such co-o nation with Project EHV.

Object of all research in extra h voltage transmission is to increase reliability and reduce the cost of e tric power to consumers. Extra-h voltage is the solution to the prob of transmitting large blocks of po for long distances, economically reliably.

G-E Issues Bulleti On Microwave

GENERAL Electric Compa has sued a new series of micro letins, featuring channel fa G-E 2KMC systems. Co der No. ECM-72, the bul scribe terminal stations, mu peaters and junctions whic the "doors" through which tion comes into and departs microwave carrier.

An application table sh

vices such as teletype, telemetry, supervisory control and telegraph are plied to the carrier.

Burroughs Introduces New Desk-Model Bookkeeping Machine

COMPACT new desk-model bookkeeping machine designed to handle variety of bookkeeping tasks has been placed on the market by Burroughs Corporation of Detroit to put fully automatic mechanized accounting within reach of small business.

Ken T. Bement, Burroughs Division general sales manager, said the bookkeeping device, released for sale or lease this month, is the latest in a series of eight low cost electric bookkeeping machines developed by the firm over the last four years.

Designed to streamline dozens of pen and ink bookkeeping operations ranging from accounts receivable and payable to billing and report writing, the new machine, a style P612, includes several new automatic features formerly available only in larger, more expensive bookkeeping machines, according to the announcement.

The machine's unusual flexibility will permit small businesses to switch to mechanized accounting without redesigning their bookkeeping systems, he added.

Totaling, sub-totaling, accumulation of items posted, carriage opening and control of machine functions such as adding, subtracting and dating are among operations performed automatically by the machine without assistance from the operator.

Program units that control the machine's automatic functions may be interchanged in seconds for different bookkeeping operations. And the flick of a key converts the bookkeeping machine to a multiple total electric adding - subtracting - listing machine, the sales manager added.

Central Illinois Light Awarded Highest Award by Safety Council

CENTRAL Illinois Light Company employees have again been awarded the highest award of the National Safety Council for the lowest accident frequency rate of any utility in its class throughout the United States. The award was presented recently at the company's safety committee meeting by E. D. Edwards to Ralph Maher, chairman of the 1958 Central Safety Committee.

It represents the thirteenth first place award for outstanding safety won by CILCO employees. Since 1933, when safety records were first kept, CILCO employees have won first place 13 times, second place seven times, third place four times, and fourth and fifth places each once.

The accident record for 1958 was 1.39 accidents per million man-hours worked. Second place was won by New Orleans Public Service with 1.70 and third place by Wisconsin Public Service Corporation with 2.37 accidents per million man-hours worked.

The average for the combination gas and electric companies of comparable size to CILCO was 4.77. The average for combination gas and electric companies of all sizes was 5.69.

Westinghouse Official Predicts U. S. Generating Capacity of 1 Trillion KWH in 1963

INCREASED demand for industrial, commercial and residential electric power could cause the United States' generating capacity to exceed the 1 trillion kilowatt-hour mark in 1963, said James H. Jewell, vice president in charge of marketing for the Westinghouse Electric Corporation.

Mr. Jewell outlined market forecasts for homes, stores and factories at the 25th annual sales conference of the Edison Electric Institute in Chicago, Illinois. Industrial use of electric power "stands right at the center of all the problems and opportunities of our economy," he said, adding:

"Thousands of business managements are deeply concerned over spiraling costs in every field. The only visible answer to this problem of keeping costs down is to find workable plans to speed automation and electrification and modification.

"I don't think I'm over-stating it to say that what happens to our standard of living in the coming years is almost directly dependent on electrification in the industrial field," Mr. Jewell said. By 1963, American factories will require 506 billion kilowatt-hours and utilities should set out to be able to supply plants with 667 billion kilowatt-hours 10 years from now, the

(*Continued on page* 24)

Westinghouse vice president said.

Using new construction forecasts to indicate commercial activity, Mr. Jewell said that $500 billion will be spent for new buildings in the next 10 years. This does not include $250 billion more that will go into maintenance and modernization work.

"Right now, the value of all the buildings standing in the United States is approximately $500 billion," he pointed out. "This means that as a country, in the next decade we will construct the equivalent of everything standing today; we'll be doubling our real estate investment."

The value of electrical equipment needed for both new construction and modernization work will total about $108 billion, Mr. Jewell said.

Turning to residential needs, he pointed out that 1968 homes will require 408 billion kilowatt-hours—2½ times the residential power used now. A big factor in this increase will be the use of electric heating and cooling. He said the Westinghouse "middle of the road" forecast calls for an increase of electrically heated homes from 500,000 today to 2,200,000 in 1968 and 8,000,000 in 1978.

"But if we did everything just right, if the industry really organized . . . it's entirely possible that we could even have 4,000,000 electrically heated homes in 1968," the marketing official added.

Mr. Jewell introduced William H. Loeber, manager of the new Westinghouse Total Electric Home Department, which has as its basis a concept that electricity can perform almost all functions and eliminate most of the manual labor in the home. Mr. Loeber outlined sales efforts being planned by his department to introduce the program to the American public and invited others in the electric industry to join in promoting the Total Electric Home concept.

Commercial Gas Awards Given by GAMA Unit

TOP honors in the Gas Appliance Manufacturers Association's 1958 "PEP" competition for utility service and promotion in the commercial gas field have been awarded to the Roanoke Gas Company, Roanoke, Va.; The Gas Company Division of the Scranton-Spring Brook Water Service Company, Wilkes-Barre, Pa., and the Ohio Fuel Gas Company, Columbus.

Grand prize awards to these winners and presentations to seven utilities judged best in three contest categories were made at the recent industrial-commercial sales conference of the American Gas Association at Philadelphia.

Harold Massey, GAMA managing director, made the presentations on behalf of the association's hotel, restaurant and commercial gas equipment division, sponsors of the annual competition. All winners received plaques, with the grand prize awards carrying an added $200 each for sales personnel in each winning category.

Grand awards were received by E. V. Bowyer, sales manager for Roanoke Gas; Joseph Betz, general manager for the Gas Company Division of Scranton-Spring Brook, and T. Z. Dunn, manager of commercial sales for Ohio Fuel Gas.

Roanoke Gas was judged winner among gas utility companies serving up to 25,000 meters; Scranton-Spring Brook was winner in the 25,000 to 100,000 meter category, and Ohio Fuel Gas was winner among utilities serving more than 100,000 meters.

In three other competitions awards were made only to medium-size and large utilities. There was a first-place tie in the large utility competition for excellence in general promotional activities, between the Southern California Gas Company and the Southern Counties Gas Company, both of Los Angeles. Arthur G. Crews, industrial sales supervisor for Southern California Gas, accepted award plaques for both firms.

Medium-size utility winner in this category was the Providence Gas Company, Providence, R. I., represented by James F. McCarthy, commercial sales manager.

The Bridgeport Gas Company, Bridgeport, Conn., was declared winner in the medium-size utility category for greatest improvement in PEP campaign participation during 1958. Frank Peterson, commercial representative, accepted the award for that utility. In the large utility competition, Oklahoma Natural Gas Company, Tulsa, was the winner with L. J. Fretwell, director of air conditioning and commercial sales, accepting the award.

Awards for achieving highest dollar sales per meter to commercial firms during 1958 went to the Harrisburg Gas Division of the United Gas Improvement Company, Harrisburg, Pa., in the medium-size utility category, and to the Laclede Gas Co., St. Louis, in the large utility group. Accepting awards were George F. Walters, commercial and industrial representative of Harrisburg and A. McClurg, manager of project velopment for Laclede.

GAMA's hotel, restaurant commercial gas equipment divi established the PEP awards as industry-wide program of servic commercial users of gas.

$2,000,000 Program Planned Empire District Elec. in 95

THE Empire District Electric C pany, (Joplin, Missouri) spent 961,000 on construction in 19?8, c pared with $2,021,000 in 195?, D McKee, president and chairman the board, reported in the annual port to stockholders. It is estim that $2,000,000 will be spent in 19

The 1958 expenditures inclu $294,000 for transmission, $1,444, for distribution extensions and provements, $33,000 for miscellane power plant improvements and $1 000 for miscellaneous general equ ment and facilities.

Most of the expenditures for 1 and those projected for 1959 are extensions to serve new customers for strengthening various parts of distribution systems.

$95,000,000 Program Planned By Columbia Gas System

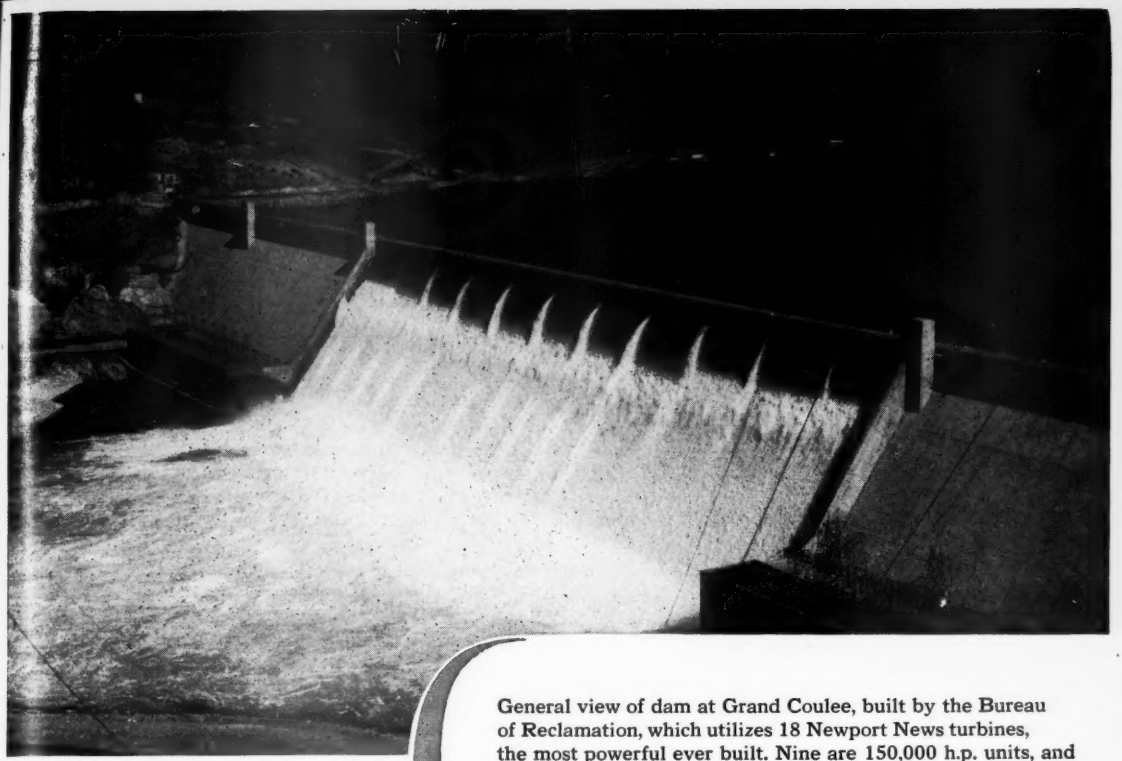
IN 1958 the expenditures by Columbia Gas System for constr tion amounted to approximately $8 000,000. In addition $51,000,000 expended during the year by G Interstate Gas Company in expan ing the facilities of its pipeline syste

In view of the continuing dema of the System's present and prosp tive customers, it is anticipated t approximately $95,000,000 will spent for construction in 1959.

$7,277,000 Program Proposed By Central Ill. Elec. & Gas

TOTAL system improvements Central Illinois Electric and Gas Co pany (Rockford, Illinois) cost $ 711,100 in 1958, according to t company's annual report.

The total construction budget f 1959 is $7,277,000. A new 55,00 kilowatt turbine-generator now und construction at Sabrooke station Rockford will require $2,20 ,000 1959. This unit is estimated to co $11,000,000 and is scheduled f commercial operation June 1, 196 Completion of a new 138,000-v transmission line and step-down su station in the Lincoln Division is al included in the 1959 budget.



General view of dam at Grand Coulee, built by the Bureau of Reclamation, which utilizes 18 Newport News turbines, the most powerful ever built. Nine are 150,000 h.p. units, and the other nine are rated at 165,000 h.p. each.

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Typical Users of Newport News Equipment

PLANT	LOCATION
Boone	Tennessee
Buchanan	Texas
Caonillas	Puerto Rico
Chief Joseph	Washington
Clark Hill	South Carolina
Deer Lake	Newfoundland
Folsom	California
Fort Patrick Henry	Tennessee
Fontana	North Carolina
Hiwassee	Tennessee
Hoover	Nevada
John H. Kerr	Virginia
Jim Woodruff	Florida
Lower Salmon	Idaho
Norris	Tennessee
Rock Creek	California
Santee-Cooper	South Carolina
Strawberry	California
Swift No. 1	Washington
Upper Salmon	Idaho
Whitney	Texas
Wilson	Alabama

Turbines designed and built for the world's largest development at Grand Coulee... and for other hydroelectric installations in America and various parts of the world... bespeak the skill and facilities offered by Newport News.

This trained organization has filled hydroelectric turbine contracts with an aggregate rated output of 7,000,000 horsepower.

Other equipment designed and built by Newport News includes penstocks, pressure regulators, valves, pumps, gates and rack rakes. Upon request, a copy of our illustrated booklet entitled "WATER POWER EQUIPMENT" will be sent to you.

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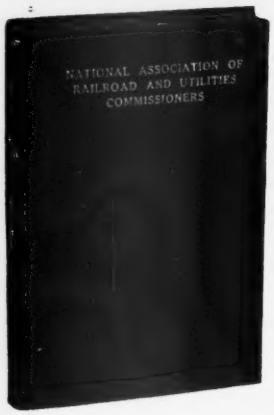

PROCEEDINGS
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Rates of Public Utilities and Transportation Agencies, Depreciation, Valuation, Railroad Passenger Deficit and Regulation of Public Utilities, Panel discussions on the subjects of "The Memphis Decision and Its Effect on Gas Distribution Companies", "The Case for Repeal of the Excise Taxes on Transportation and Communications", and "The Treatment of Accelerated Depreciation for Rate Making Purposes."

Price $10.00—Approximately 550 Pages

OTHER PUBLICATIONS OF THE ASSOCIATION

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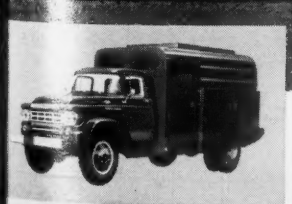

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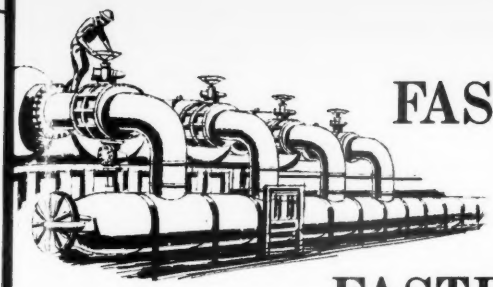

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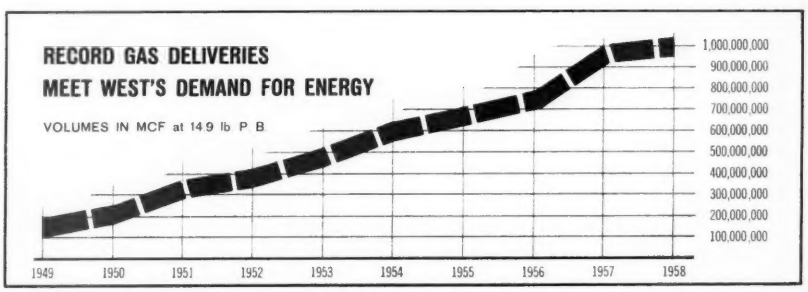

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